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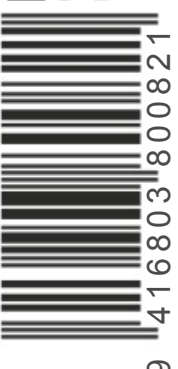
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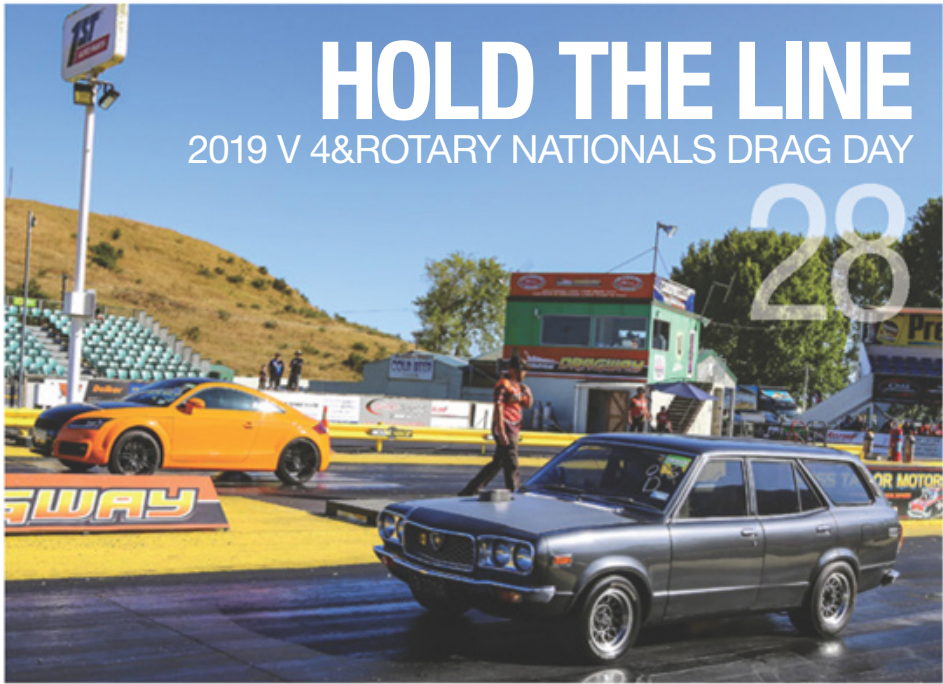


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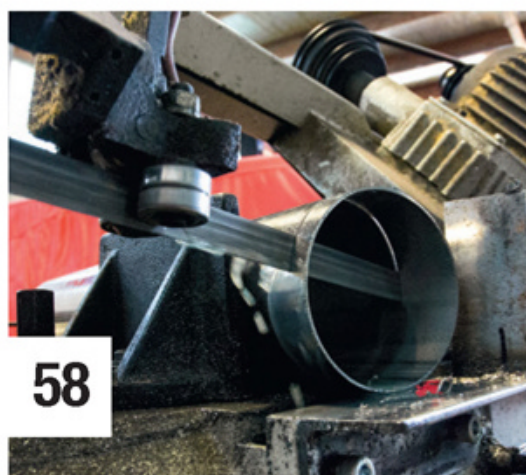
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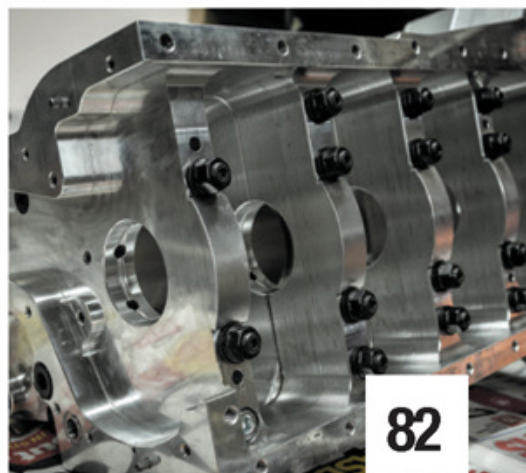
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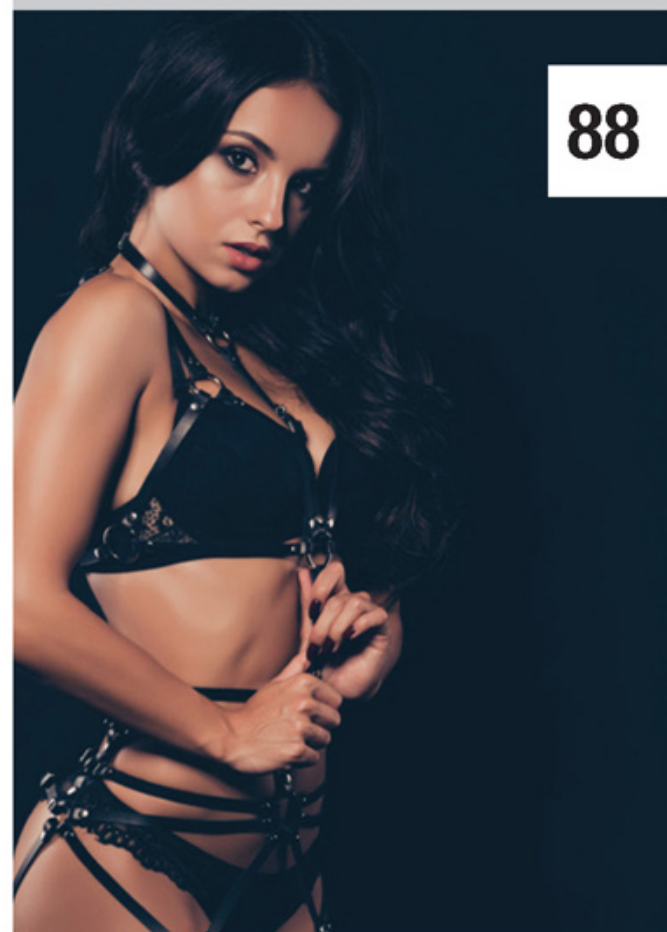


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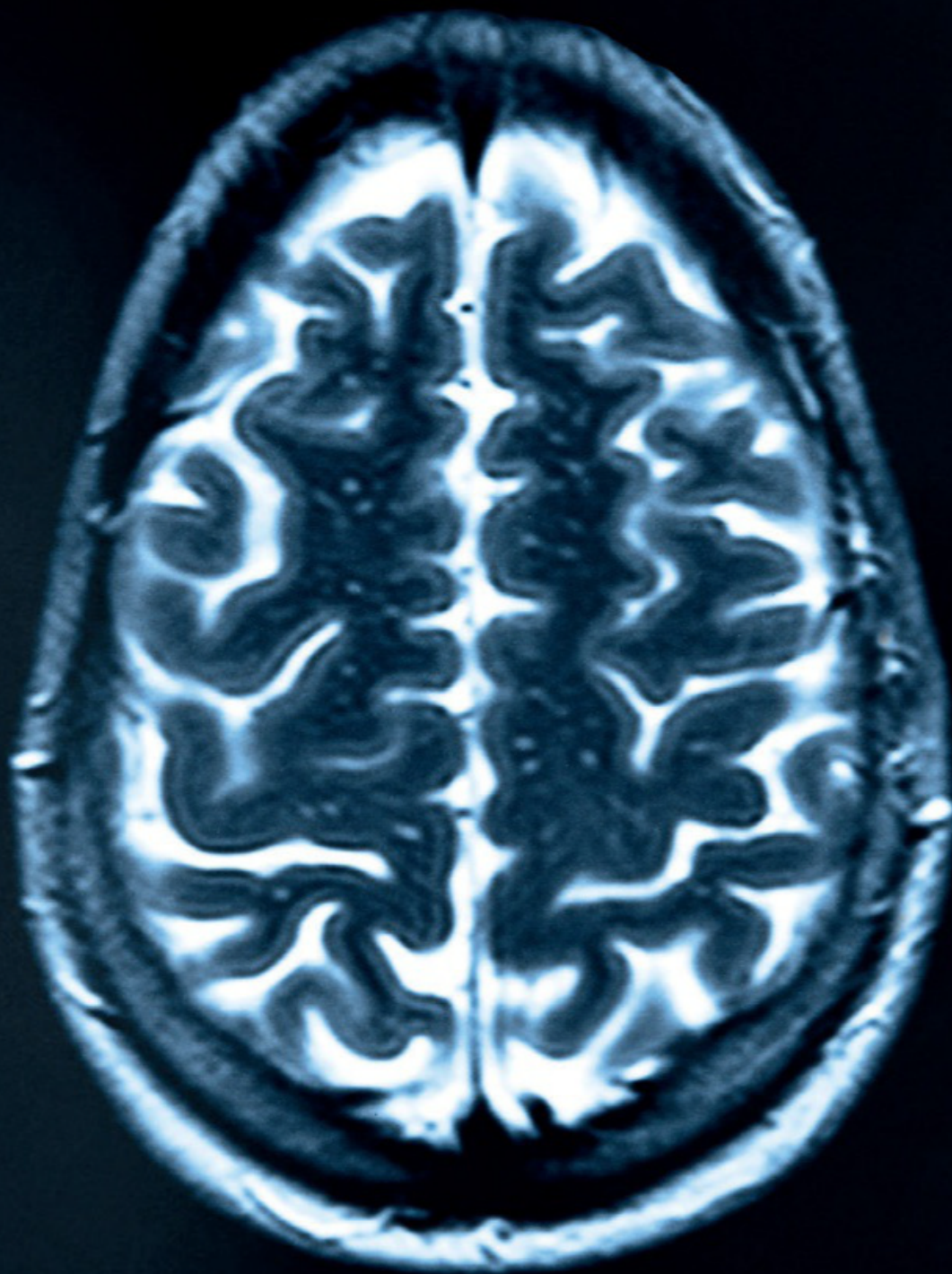
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SECOND-CLASS SPORTS

Now, I know that speedway is not something that we cover in *NZ Performance Car* and it sits outside the realms of what the magazine is at its core. Despite this, I know a lot of you enjoy a good Saturday night under lights watching the sport, be it midgets and sprint cars, or saloons and stocks. Given just how popular it is here in New Zealand, you probably even know a driver or crew member or two. So I wanted to touch on the recent turn of events surrounding Western Springs Speedway effectively being shown the door after a 90-year tenure at its CBD location by its landlord, Regional Facilities Auckland (RFA). The RFA, a council-controlled entity responsible for all public facilities in Auckland, has tried to sidestep the current and ongoing wider discussions with the council and stakeholders in speedway.

Earlier this month, it attempted to bypass these talks by simply issuing a statement saying it would not be renewing the Springs lease past 31 March, effectively ignoring any sort of logic and treating speedway as a second-class sport compared with rugby and cricket. There are ongoing talks of building a new facility near the airport, but the cost would be pushing \$30M we're told, and, in its place at the Springs, there's a proposed ratepayer-funded \$90M high-performance New Zealand Cricket (NZC) facility (not Auckland cricket, I might add).

So that will become over \$120M in expenditure just so we can shift a less popular sport — cricket — from Eden Park, which in itself would effectively bankrupt Eden Park. Now, I'm about as anti-ball sports as you can get, but that really has nothing to do with how I feel motorsport is being treated here. The fact is that there is zero business case that I've seen to warrant this new facility for NZC, and no one in the council is likely to be able to green-light such a project without a ratepayers' riot being staged. So why the RFA (which signed a memorandum of understanding with both the Springs promoters and its own bosses, the council) were allowed to do this before actual plans were set in stone is beyond me.

Despite what some are saying, this is not about noise — speedway is protected at this CBD location by the unitary plan. There is clearly another agenda at play that I'm not privy to. But it was good to see a collective voice seemed to make a difference, with the council ordering a stay of execution to keep open-wheel racing where it belongs in Auckland, for at least one more year. I guess a 30,000-strong petition collected over a few days is hard to ignore.

My personal opinion is that the speedway should not move. I see it as suicide for the sport, no matter how good this proposed track in the back of Manukau may become for the racers. I just don't see non-diehard fans making the effort to travel there in this day and age. It's reported that over 120,000 race fans went through the gates at the Springs last season, numbers that every other motorsport — every sport for that matter — dreams of attracting in a season. If you don't think the central location and the mana that the Springs location has played a huge role in that, you're mistaken.

There is something very special about that place. Kids run free, police are never in attendance (unlike at other major sporting events), and the atmosphere during feature time in that natural colosseum is nothing short of electric. So it's no wonder how big open-wheel racing is in Auckland right now — arguably, it's the best it's ever been. A shift will fracture this, something I feel it will never recover from.

Motorsport is always treated as a second-class sport here in New Zealand, so it's nice to see something go our way for once. We're not as minority as certain parties involved would lead the public to believe. I won't even start on the industry behind speedway that flows money into the local economy. We now have a year to save it, and I, for one, will do whatever I can to save the Springs. I don't want a cent of my rates going to that high-performance facility!

Damn the man, save the Springs!

Marcus Gibson

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ISSN ISSN1173-972X

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LIFE IN CIRCLES

Damn, we're bloody lucky to have the level of aftermarket support that we have today when it comes to modifying almost any chassis. The pioneers of yesteryear put in those hard yards so that, with a bit of googling, a couple of quick phone calls, and by punching in your credit-card details online, you've got yourself everything you need to build a rad car sitting on your doorstep within hours. It's like being in a candy shop as a kid and having your parents, instead of only letting you get a couple of lollies, hand you the credit card and tell you to go to town.

I don't know about you, but most of my spare mind space is used to piece together infinite numbers of builds that I tell myself will eventuate some day, despite my knowing that none ever will. These theoretical parts lists are created, considered, and thrown into the abyss almost all day long. Over the years, it's dawned on me that what was once considered 'a build' has progressed far beyond what it used to be. Not that long ago, slapping in a set of coilovers, Tek screwing on side skirts, and bolting on a decent set of wheels was the goods. Now, if you want to impress anyone — namely the internet — you need to chop your car half to pieces, engine-swap in a mental power-maker, and run the latest bank-account-draining bodykit.

That's not to say that this is necessarily a negative thing; it actually means that we're constantly seeing new styles emerge, and the automotive industry is forced to keep up by churning out fresh ranges on the regular. If anything, it's helping to fuel the hobby — in that sense, at least.

Regardless of what the latest trend is or how people will determine what a build is in the future, there's always going to be one simple modification that will remain the more important than anything else to me: wheel choice.

I'm not talking about the debate between 'genuine' and 'fake' wheels — I'll leave that for the Instagram commenters. I mean doing the car justice by bolting up a set of spinners that enhances its styling cues; actually suits the period; and, above all else, has proper fitment! For me, wheels are the fastest way to make or break the whole car. With the right set, all you need is a good dose of low and you're winning. The wrong set, and no matter how much time you spend modifying everything else, it will still look bad. The next time I see an R32 Skyline with 15x8-inch (+0) D-windows and 215/60 rubber on it, I'm going to ... just don't, please!

Finding that perfect set ain't an easy task — I know; I've spent a ton of time mentally photoshopping combinations to filter out what looks

good and what needs to be binned. I've spent even more time driving to the edges of the earth and back to collect those that would never even see a set of studs in my ownership. I still own multiple examples that couldn't be bolted to any car I currently own even if I wanted to; hell, one set wouldn't fit any car I've ever owned.

Finding wheels takes time, effort, and consideration, and becomes borderline addictive. I've come to accept that collecting wheels is one habit that I won't be able to kick any time soon — at the time of writing, there's one set in transit and another, which I previously owned and am trying to buy back, being bartered over.

So, next time you're cracking those wheel nuts in anticipation of scrapping the factory alloys and dropping a stack of cash on a new set you found on Facebook Marketplace, I implore you to take a second to really think about whether they actually work or whether you simply want them to work. Building better cars, together!

Jaden Martin

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THE BLOCK PARTY RETURNS

After the Gymkhana series creator and prolific Hoonigan wheelman Ken Block watched his 1991 Ford Escort Cosworth Group A rally car burn to the ground while racing in New England in July 2018, he knew exactly what to do: build an all-new Cossie and take it on a worldwide tour! The Hoonigan crew announced a new episodic YouTube series that will be live on Block's channel and detail the tour as the team and

Cossie V2 travel the world competing in various national-level stage rally events — including stints at the Goodwood Festival of Speed and Gymkhana GRID.

As New Zealand rallying has a pretty serious name on the international scene, Block has confirmed that he will be coming to the International Rally of Whangarei, 3–5 May 2019. It won't be the first time that he's made a trip

down to this part of the world, having previously competed at Rally New Zealand and Otago Rally and won the Rally of Whangarei back in 2015.

Block's tour will also include the 100 Acre Wood Rally, Donegal International Rally, and Rallylegend (Italy).

For all the finer details of the New Zealand event and to get your hands on tickets, head to rallywhangarei.co.nz.



WHANGAREI TAKEOVER



Back for the fourth year running, The Tint Shop's Show & Shine is going down on Sunday, 5 May 2019! While the event is hosted at the same location as previous years (The Tint Shop, 101 Port Road, Whangarei), because of how packed it was last time around, The Warehouse has kindly lent the use of half their car park to allow the event to become even bigger — anyone that's been to the North knows how much extra parking that is. The Show & Shine kicks off at 10am sharp, entry doesn't cost a dime for cars or spectators, and there's even a free BBQ to score yourself some snags. And to sweeten the deal that little bit more, it's the same weekend as the Rally of Whangarei, and with the service park conveniently located just down the road, you'll see all the cars of New Zealand rallying roll through, including Ken Block's Cossie V2!

Hundreds of Northland's finest cars, prizes, a free feed, a rally car convoy, and it won't cost you a cent? That's the best damn way to spend a day that we've ever heard of.



HAVE YOUR SAY

Heads up to anyone who has modified their car, or who intends to — which should be all of you: the Low Volume Vehicle Technical Association (LVVTA), the organization that sets certification standards, will soon open the *Low Volume Vehicle Standard 205-00(02): Wheels and Tyres* for consultation. What that means is that you will have your chance to pass comment on the existing standard and any suggestions or issues may be taken into account when it is revised in the near future.

The *Wheels and Tyres* standard includes all requirements for wheels and tyres on LVV-certified vehicles, including tyre-to-rim fitments, wheel spacers and adaptors, and wheel manufacturing requirements.

Ever thought that not being able to run a 215/40 tyre on an 11-inch-wide wheel is a crime against humanity? This is the time to speak up.

The current standard can be found in the Documents section of the LVVTA website (lvvta.org.nz), and all submissions received before 20 May 2019 will be summarized and analysed in order to be considered when the standard is redrafted.

If necessary, the LVVTA will undertake further consultation with key groups, and anyone who makes a submission will be provided with a copy of the updated standard for review prior to the revised standard being finalized. At this time, submissions are only to be in relation to the *Wheels and Tyres* standard.

Submissions must be made by email to submissions@lvvta.org.nz or by post to:

LVVTA Submissions
PO Box 50-600, Porirua, Wellington 5240



WTAC DATES ANNOUNCED

We're on the back straight of the year, and the team behind the Yokohama World Time Attack Challenge (WTAC) has announced the dates for the 2019 incarnation! So, if you've had your mouse hovering over the buy-now button on your favourite airline's website, waiting for the dates to drop, wait no more: WTAC 2019 has been confirmed to take place 18-19 October at Sydney Motorsport Park. As with the previous events, WTAC will welcome local and international drivers to duke it out to claim that one perfect lap.

The International Drifting Cup will also return to the weekend line-up, which typically sees a super-strong Kiwi contingent jump the ditch to compete, and organizers say that the largest outdoor car show in the country will be going down.

There is no word yet on who the big-name drivers will be, but if previous years are anything to go by, it'll be a pretty damn serious list. Spectator tickets go on sale in June; competitor expressions of interest open in April.

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DUFFIN ENTERS NIES

With championship wins in both SS200, GT2, and numerous top tens at Leadfoot, Andy Duffin and the 3 Rotor Race team have now set their sights on the Eneos North Island Endurance Series (NIES) with the Link ECU FD RX-7. The team have been busy making changes to the car swapping from sprint to endurance spec, changes that include revamping the cooling in the cabin — heat soak causing the in-cabin temps to reach 65 degrees after a 20 minute run. Naca ducts, heat sheilding, and a drinks system have now been added too.

Mechcanially the FD now has an extra fuel cell to bring capacity up to 90 litres, which is complete with a twin dry break system. Flat shifting has also been added to the Link ECU, cutting shift times in half for

the TTI, down to 80 milliseconds, which Andy tells us has transformed how the FD drives. The first round of the three round championship will have now taken place, with two rounds to go!



RECORD- BREAKING GT-R!

When Skyline GT-Rs started heading towards low-seven-second ETs and 200mph (322kph) trap speeds across the ditch in Aus-land, all the while retaining the ability to legally drive on public roadways, the world eagerly awaited the day that a six would flash up on the timing boards.

Maatouks Racing and Croydon Racing Developments (CRD) may have traded the record back and forth a handful of times, but it was the 'JUN II' car of CRD that broke into the six bracket first, on 6 March at Sydney Motorsport Park. The pass was recorded at 6.97 at 202mph (325kph), making JUN II the quickest and fastest street-legal GT-R on the planet.

If that wasn't good enough for the team at CRD, the very next day, the car ran another record-breaking pass, this time a 6.92 at 203mph (327kph), making it not only the quickest and fastest street-legal GT-R but also the outright quickest and fastest Skyline GT-R in the world — taking the record from Maatouks' 'METRO' Skyline GT-R drag car with a 6.93 at 203mph.

The CRD team believes there is still more left in the car, and will continue to chase betterment of its ET. With Maatouks knocking at the door, will it only be a matter of time before the record trades hands once more?



HONDA RECORD

If you've ever doubted the capability of Honda's K-series engines, US-based R Garage set a bunch of records in its K20-powered dragster at Hal Far Raceway on 18 March. The 6.59-at-197mph (317kph) pass not only makes the car the second-quickest rear-wheel-drive Honda and ninth-quickest four-cylinder outright — according to *Drag Import News* — it set the record as the quickest Honda four-cylinder in the world!

MITSUBISHI TO MAKE ONLY SUVs

The managing director of Mitsubishi UK, Robert Lindley, has confirmed at this year's Geneva Motor Show that the automaker will now produce only SUVs. Lindley suggested that, on a global scale, the company produces a small number of vehicles and attempting to compete with market trends, such as sports cars, "would be difficult to be economically viable".

A moment of silence for another sports car bloodline gone.

ELECTRIC GT-R AND Z-CARS?

Comments made to *Top Gear* by Nissan's chief planning officer Philippe Klein have alluded to the possibility of the next-gen GT-R and Z-car being electric powered.

"[Performance cars are] under the gun of regulations ... the emotion is still there, for us and for our customers. You should keep the faith, because we do!" said Klein, who later added: "I don't know how much experience you have with EVs [electric vehicles], but they are very fun to drive."



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NIGHT SPEED DRAG WARS 8 MEREMERE DRAGWAY, MEREMERE

Featuring some of New Zealand's quickest street-legal imports and rotary-powered machines, the Night Speed Drag Wars series is one of the few events in the country in which drivers with a current license, warrant, and rego can compete in anything from their high-powered street car to their nana's old Corolla. This season increased from six meetings to eight, three of which were on Saturday nights. With this being number eight, drivers will need to put it all on the line to bring fame to their name. Priced at \$45 a pop to race, with spectators paying \$15, gates will open at 5.30pm and racing kick-off at 6.30pm.



DRIFT SOUTH ROUND 4 MIKE PERO MOTORSPORT PARK, RUAPUNA, CHRISTCHURCH

The team at the Canterbury Car Club has drifting on lock for the South Island, and this will mark the final round for the 2018–2019 season of Drift South. The top-tier line-up of drivers will be wrapping things up with a show of force at Mike Pero Motorsport Park, and, after a season of hard-fought battles, a new southern king of drifting will be crowned. More information can be found at driftsouth.co.nz, or on Drift South's Facebook page.



CJC PRESENTS: GRIPFEST '19 MANFELD CIRCUIT CHRIS AMON, FEILDING

Whether you love 'em or hate 'em, the controversy kings known as Circle Jerk Crew know how to handle their business, and part of that means hosting the slickest of track days. While it's been two years since the last incarnation, Gripfest is set to return in 2019 with a new venue on the poster — Manfeild Circuit Chris Amon in Feilding. With limited and exclusive spots and top-tier organization to ensure maximum track time, it's a solid experience. Driver spots are still open, or if you're down to watch some grass-roots circuit thrashing then you're in the right place — spectators get in for free. For all the finer details, search on Facebook to find the event, or simply head to the Circle Jerk Crew page. You won't regret it.



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13 APRIL
NZ SUPERLAP ROUND 4
Pukekohe Park Raceway, Pukekohe

13–14 APRIL
NZRC DRIVESOUTH RALLY OF OTAGO
Dunedin

14 APRIL
RUAKAKA STREET SPRINT
Sime Road, Ruakaka

20 APRIL
RAPANATS BURNOUT COMPETITION 2019
Masterton Motorplex, Masterton

21 APRIL
HTOWN HARDPARK 2K19
Innes Common, Hamilton

28 APRIL
AKAROA CRUISE FOR A CHANGE
Tai Tapu

28 APRIL
CAFFEINE AND GASOLINE
Hampton Downs Motorsport Park, Te Kauwhata

28 APRIL
AUTOSTANCE ELITE MEET
Autostance, East Tamaki, Auckland

3–5 MAY
NZRC INTERNATIONAL RALLY OF WHANGAREI
Whangarei

4–5 MAY
NZ SUPERLAP ROUND 5
Hampton Downs Motorsport Park, Te Kauwhata

5 MAY
THE TINT SHOP SHOW 'N' SHINE
101 Port Rd, Whangarei

11–12 MAY
2019 ENEOS NORTH ISLAND ENDURANCE SERIES ROUND 2
Pukekohe Park Raceway, Pukekohe

18–19 MAY
2019 CHROME EXPRESSION SESSION (SOUTH ISLAND)
Mike Pero Motorsport Park, Ruapuna, Christchurch

26 MAY
AUTOSTANCE ELITE MEET
Autostance, East Tamaki, Auckland

1 JUNE
MOD (MITSUBISHI OWNERS DAY) 2019
Hampton Downs Motorsport Park, Te Kauwhata

2 JUNE
NZRC LONE STAR CANTERBURY RALLY
Christchurch

7–10 JUNE
CARNIVAL 2019
Bruce McLaren Motorsport Park, Taupo

7–8 JUNE
2019 ENEOS NORTH ISLAND ENDURANCE SERIES ROUND 3
Hampton Downs Motorsport Park, Te Kauwhata

15 JUNE
GTR FESTIVAL
Hampton Downs Motorsport Park, Te Kauwhata

22 JUNE
NZRC SOUTH CANTERBURY RALLY
Timaru International Motor Raceway, Timaru

28 JUNE
DRIFT SOUTH HAVE A GO DAY
Mike Pero Motorsport Park, Ruapuna, Christchurch

30 JUNE
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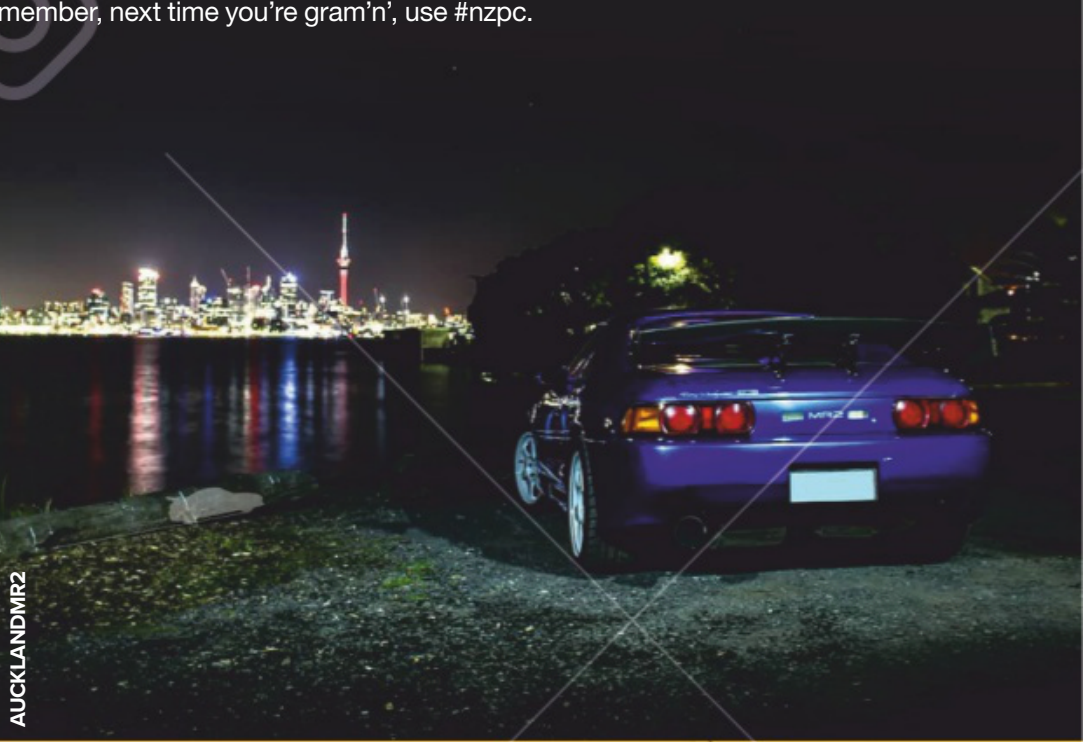


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— 1974 MAZDA 808 STATION WAGON —

MASTER

FROM SKID HACK TO SKID KING, STEVE ELLICOTT'S 808 WAGON IS A LIVING LEGEND
IN OUR SCENE, AND THE RECENT REWORK HAS TAKEN IT TO AN ELITE LEVEL,
WORLDS AWAY FROM THE PIGPEN PADDOCK ORNAMENT THAT IT ONCE WAS

WORDS: **MARCUS GIBSON** PHOTOS: **ADAM CROY, DANNY WOOD**

BLASTER!





“When we pulled it out of the paddock from the back of that pig farm in Rotorua, I never thought it would end up like this.” This was the opening quote used in our first feature on Steve Ellicott’s 808 wagon back in Issue No. 240, when it was a pure skid hack. A statement that still stands today, but one that musters up even more disbelief about what the Mazda 808 has become. RX Master and Best Extreme Paint at the 2019 V 4&Rotary Nationals; Best Paint, Best Overall, and first in the burnouts at REunion 2019 — all this from a shell that was serving as accommodation to a few pesky porkers only a few years ago? You betcha.

Before we delve into how the infamous skid hack has become an elite-level show car, first we better wind the clock back to quickly recap how the wagon got saved from the paddock. Ripped from its mud-locked home purely for its chrome trim, the wagon was given to Steve as payment for some tube framing on a

friend’s 808 wagon. The idea was to build a cheap skid hack with it, but another friend took it upon himself to mini-tub it in secret. This set Steve on to the trajectory to building what became one of the most popular and prolific skid hacks in New Zealand. Wild fourth-gear double-360 tip-ins, big smoke shows, and popped tyres totalling in the hundreds — if the comp was worth showing up to, Steve would be there mashing the gas.

But, over this time, the wagon was morphing into more than just a skid car. It was multi-talented, and events like Chrome, Power Cruise, and REunion became the meets of choice. At one of those events, last March, a small oversight resulted in a high-speed collision with the Armco on turn one. It was this that set the car on its path to greatness.

“I pulled top of fifth on the straight, like limiter fifth, and went to pull it up, realizing I’d left the rear brakes off,” recalls Steve. “The track was a little slippery, so the left front kept locking up. There was no way I was pulling it up from that speed. At that

A FULL CUSTOM INTERIOR BY MIDNIGHT UPHOLSTERY INCLUDES CUSTOM RECOVERED RACEPROS AND A SUEDE DASHBOARD

HEART

ENGINE: Mazda FD RX-7 13B turbo, 1300cc, two-rotor
BLOCK: Stage 2 ported FD plates, dowelled, balanced, a few other Green Brothers Racing tricks

INTAKE: Elite lower manifold, Mazda Cosmo upper manifold, FD RX-7 throttle body, Heat Exchanger Services custom intercooler, custom intake

EXHAUST: 3.5-inch system, Manawatu Muffler Centre boiler

TURBO: BorgWarner S69SXE, steam-pipe manifold

WASTEGATE: 50mm Go Fast Bits (GFB)

BOV: 50mm TiAL

FUEL: Dual Bosch 044 main pumps, SX fuel regulator, four 1680cc injectors, two 1550cc injectors, Teflon braided lines, AN fittings

IGNITION: AEM Smart Coils, MSD leads, NGK 115 race plugs

ECU: Link G4+ Extreme

COOLING: Green Brothers Racing-supplied custom radiator, Green Brothers Racing-supplied oil cooler, 16-inch Spal fan, dual eight-inch oil-cooler fans

THE BONNET IS A TRICK PIECE. A ONE-PIECE SKIN LEAVES A FLAWLESS FINISH, BUT IT HIDES A LAYER OF THERMAL PROTECTION UNDERNEATH TO ENSURE THAT THE PAINT ON THE BONNET STAYS GLOSSY



MASTERBLASTER!



DRIVELINE

GEARBOX: Richmond five-speed (dog-engagement gear set)
CLUTCH: Quarter Master twin-plate
FLYWHEEL: Ten-pound chromoly
DIFF: Holden Rodeo housing, full spool (3.7-ratio)

SUPPORT

STRUTS: (F) FC RX-7 XYZ coilovers, (R) QA1 coilovers
BRAKES: (F) FD RX-7 calipers, FC RX-7 rotors, Hawk Race Pads; (R) twin Altezza two pots, ASD hydraulic handbrake
EXTRA: Narrowed front chassis rails, narrowed custom rear chassis rails, custom floorpan, custom tubs, custom firewall

INTERIOR

SEATS: Retrimmed Racepro
STEERING WHEEL: OMP
INSTRUMENTATION: Racepak dash

PERFORMANCE

POWER: 490kW
BOOST: 26psi
FUEL: E85
TUNER: Richard at Green Brothers Racing

point, things sort of went into slo-mo, and I was not sure whether to go in sideways or straight. The front is tube framed, so I decided to go in straight. I bananaed the steering wheel to the dash, and bent the brake pedal back.”

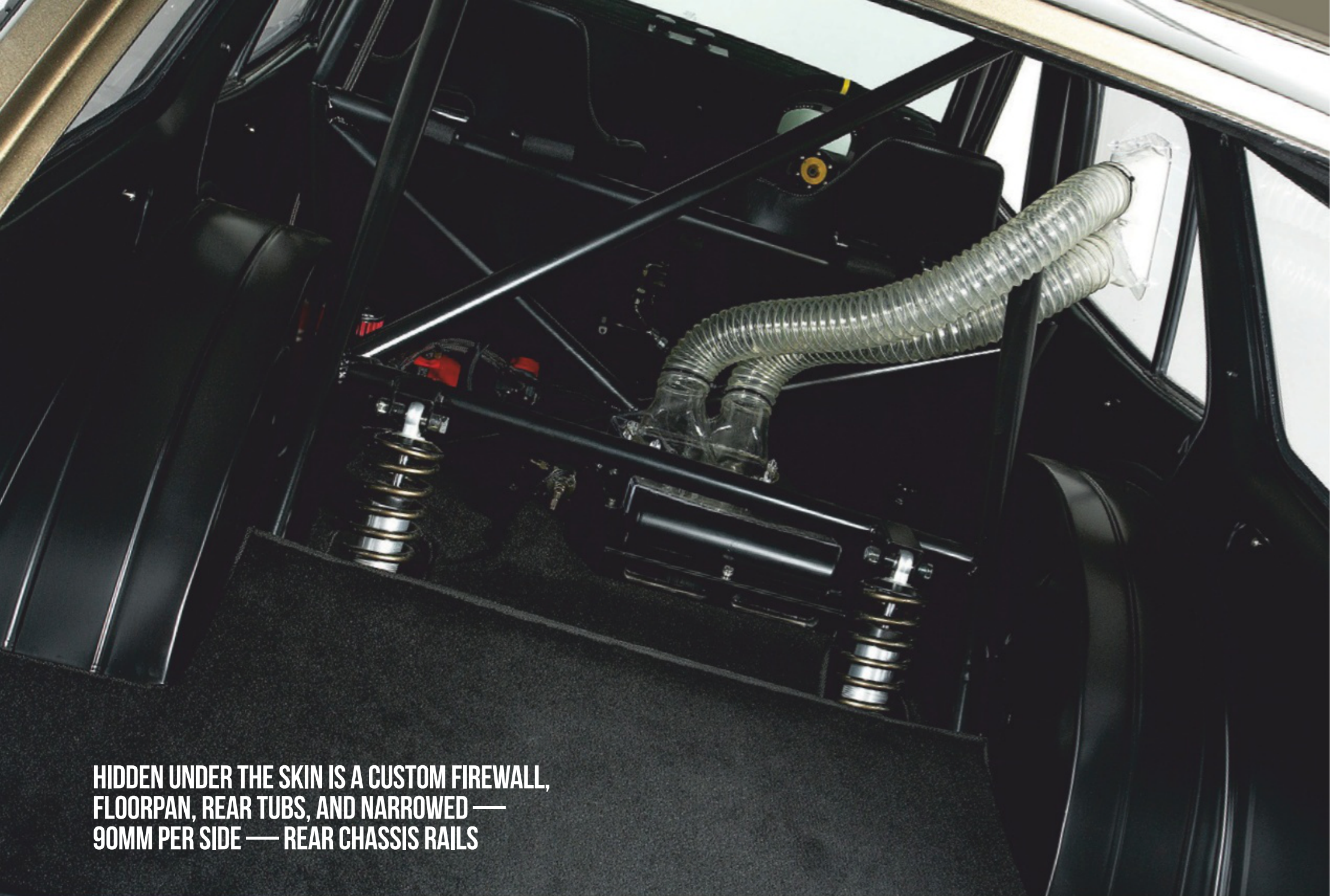
Despite the wagon now looking very second hand, the damage wasn't as bad as it seemed. The tube frame bore the brunt of the impact, meaning that the wagon would live to skid another day. Enter Procraft Collision, the team responsible for transforming the wagon into the elite machine you see today. To be fair, the pigs could probably have had their shelter back if they wanted it, as most of the original panels soon found themselves in the bin. The only original panels left are limited to the roof and

one door skin. Re-tube framed, the front received a 12A Savanna conversion, while the rear earned new quarters, a new-old-stock tailgate and plenty of custom modifications to suit the new wheel and tyre combos. Starting at the A-pillar, the sills splay out to be 15mm wider at the beginning of the rear arch where they meet the new quarters, which have been pumped by 20mm each side, bringing the total to 35mm wider than stock.

But it's what's on the inside of these rear doors that is really trick. A set of much taller tubs now takes pride of place in the rear, and while the easy way around it would have been to render those rear doors useless — there was already a roll cage in the way anyhow, right? — this is not the case. They too, have been tubbed,

SINGLE-DIGIT PASSES ARE WHAT STEVE'S EYEING UP ONCE THE DRAG SLICKS ARE BOLTED ON. "IT'S GOT ALL THE GEAR UNDER THERE TO DO IT; WE JUST NEED BETTER GEARING AND THEN WE'LL RUN IT. WE HAVE TAKEN WEIGHT OUT OF IT ANYWHERE WE CAN, EVEN THE DOOR CARDS ARE ONLY SWAGED 0.8MM,"





HIDDEN UNDER THE SKIN IS A CUSTOM FIREWALL, FLOORPAN, REAR TUBS, AND NARROWED — 90MM PER SIDE — REAR CHASSIS RAILS



requiring raised latches and catches with custom mechanisms inside the doors. It's about as custom as it gets, the kind of stuff that had the panel beater reportedly swearing Steves name.

The reasoning for the new, much larger tubs was to accommodate the 28x9-inch drag slicks that Steve was dying to bolt on. But don't for a second think that the wagon's now become a dedicated drag car. "I don't have the budget or patience to have a dedicated drag car," Steve says. "I prefer to have one that can do it all, otherwise I'd have to build 10 cars and the missus won't let that happen. So I'd rather just keep this one multipurpose. It's just more fun. You can do everything at an event like REunion; you can go out, win the drags, then come in and go straight onto the pad, then take people for rides, and go and spin out in the drifting."

It's this dedication to being multipurpose that meant that the tubs would have two other wheel sizes to accommodate — the new 17x11.5-inch Works, and the larger diameter 17x7-inch skid wheels from before. The taller the tyre, the higher the wheel speed, which results in more smoke!

Mechanically, the wagon remains somewhat unchanged from before the crash. Luckily, the block, which was only six months old at the time, survived the impact, despite most bolt-ons being destroyed. Built by Green Brothers Racing, the FD was brand new from Mazda before being stripped-down and ported. Pumping out 490kW with a BorgWarner S69SXE huffer bolted on the side

WHILE THE EXTERIOR MIGHT BE GLOSSY, THE INTERIOR AND WHEEL CENTRES ARE SATIN VERSIONS OF THE SAME PAINT. THIS FURTHER EXTENDS TO THE INSIDE OF THE DOORS WHICH ARE HALF SATIN BLACK TO MATCH TO THE DOOR CARDS



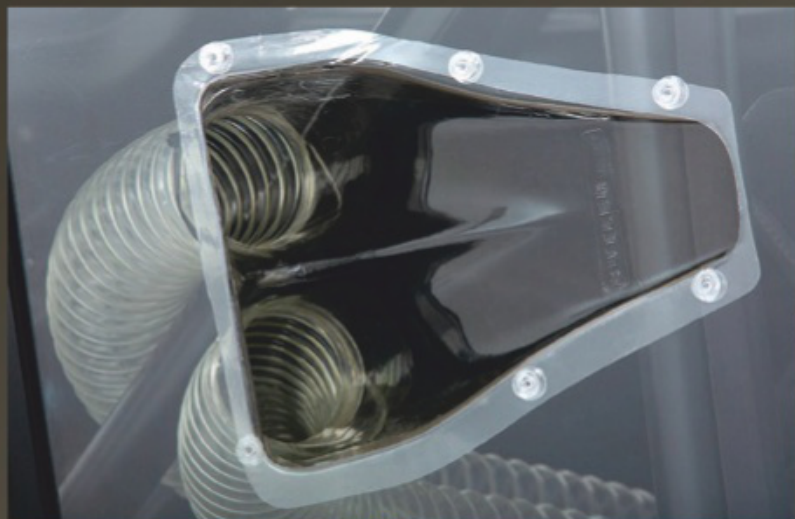
and producing the highest boost setting of 28psi. The cooling package, however, wasn't as lucky, so the opportunity to rework it saw a custom radiator — 150mm larger in both directions — kick the new larger oil cooler to the rear. Now mounted in the boot floor with a pair of eight-inch fans drawing air through rear-window NACA ducts, it ensures that the oil has some form of cooling mid skid when Steve's hard up fourth. Unsurprisingly, it's burnouts that are the hardest of all disciplines on the car, and it's what most of the engineering effort has gone into.

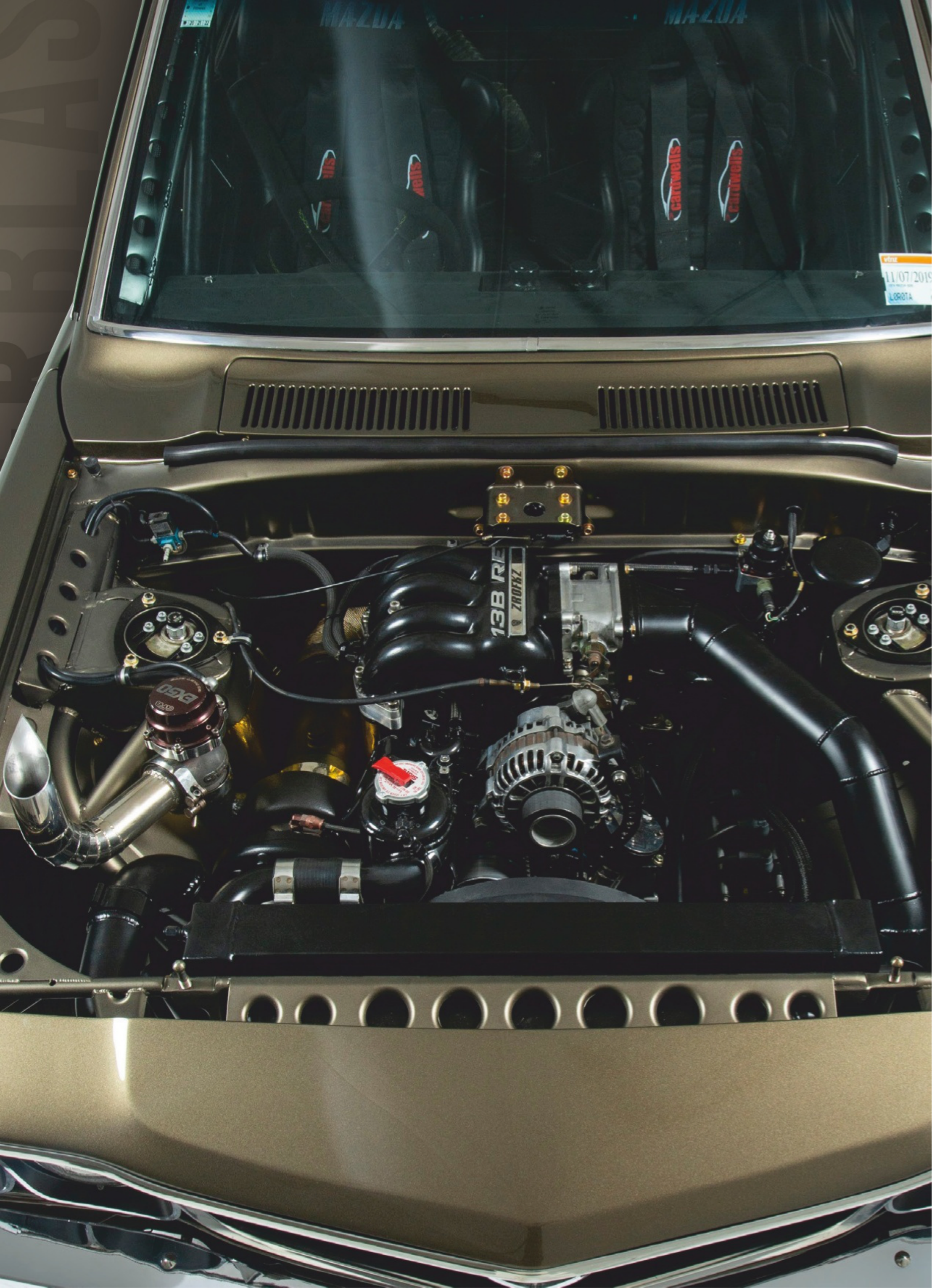
One of the bigger issues was the sloosh seen during tip-in; "You used to watch it on the GoPro. As it had a clear hose, you'd see the oil shoot up the hose. Two burnouts would fill the 1.5-litre surge tank in the back. Motul ain't cheap," Steve says.

A new breather set-up has seen a primary breather can mounted in the engine bay with a drain back into the front cover, and a vent headed off into the catch-can in the boot. That's some serious Gs being created during the tip-in, but when you consider that he selects high boost, fourth gear, and then brings the 13B up on the two-step before dropping the clutch somewhere around 7000rpm, it's not hard to see how that happens.

There is also some other wizardry going on in the background. When engaging the line locker, a signal is sent to the ECU, which switches maps to burnout mode, which has two tunes, high and low boost. Once the tip-in is over, and the wagon's stayed off the wall, Steve switches over to low boost (14psi) for the remainder of the skid, in an effort to keep intake temps down. It's during this

THE WORK MEISTERS
— 17X8 INCHES UP
FRONT AND 11.5 INCHES
AT THE BACK — ARE
ACTUALLY FROM STEVE'S
OLD 1300. AFTER
PURCHASING THEM
BACK FROM THE NEW
OWNER, NEW LIPS WERE
ORDERED TO SUIT THE
OFFSETS IN THE WAGON







AIR JACKS NOW ADORN THE REAR TO MAKE TYRE CHANGES QUICKER, SO THAT MEANS MORE SKIDS!

time that the ECU earns its keep big time, no matter how much red mist clouds Steve's conscious thoughts: "It has sensors on everything, and safeguards Rich[ard Green] built in, it just won't let me kill it." And, like any competitive racer, the tuner is constantly on the job. In fact, you might be surprised to find that, after each skid, the data are sent off via the wonders of modern mobile phones to tuner Richard, who will go over everything, tweak the tune, and send it back to Steve for him to reload it into the ECU before lining back up for another skid. Yeah, you could say that Steve is very passionate about skids.

But there remains one big question we have to ask him, and one that many murmured during the wagon's unveil on our stand at Nats (following a blurry seven-day stretch that saw the wagon go from bare shell to runner). Would the 200-plus hours that were sunk into the paint job affect the 'ZROFKS' attitude Steve once displayed, especially during skids? The short answer is, no; the long answer is yes, to a degree. "I'll only pop tyres if there is good coin on offer, and don't expect any double-360 tip-ins again anytime soon," Steve says. But by the same token, the win at the REunion burnouts proves that he ain't letting that gloss get in the way of a good wheel burn, 200 hours of perfectly flow-coated and gapped panels be damned.

EXTERIOR

PAINT: Custom paint by Procraft Collision Repair Centre
ENHANCEMENTS: Custom widebody rear quarters/sills, tubed rear doors, 12A Savanna RX-3 front conversion, Lexan windows

DRIVER PROFILE

DRIVER/OWNER: Steve Ellicott

AGE: 32

LOCATION: Auckland

OCCUPATION: Self-employed builder

BUILD TIME: 10-month rebuild

LENGTH OF OWNERSHIP: Four years

THANKS: A massive thanks to Adam and the team at Procraft Collision Repair Centre — the car simply would not be what it is without their skills and passion; Green Brothers, for their engine, tuning, and cooling package; Link ECU, for the ECU that keeps the engine alive; Midnight Upholstery, for the short-notice interior job; Mark at Professional Tyres, for constantly swapping rubber; Azhar; Ben at Willfaband all the boys who helped take it from a shell to a completed runner in seven days before the 2019 Nationals



NO, THE COILOVERS WEREN'T WOUND DOWN FOR THE SHOOT. THIS IS THE RIDE HEIGHT AND FULL LOCK IS ACHIEVED AT IT. HOW? THE FRONT CHASSIS RAILS HAVE BEEN SHIFTED IN 30MM AND A MIX OF 323 AND FC SUSPENSION COMPONENTS CAN BE FOUND EACH SIDE



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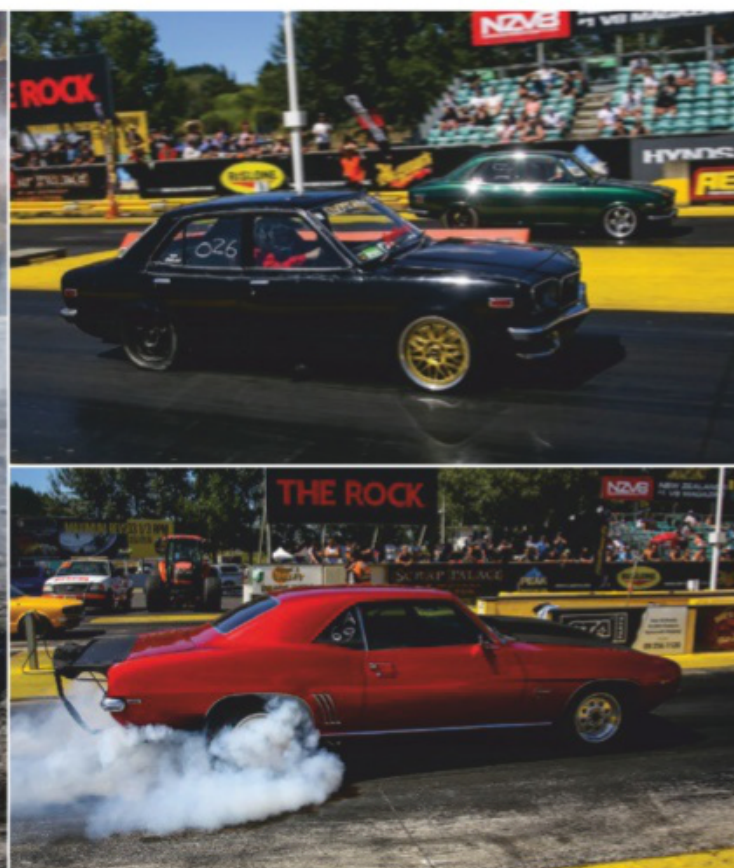
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WORDS: JADEN MARTIN PHOTOS: ADAM CROY
RUNNING THE STRIP AT THE 2019 V4&ROTARY NATIONALS DRAG DAY

HOLD THE LINE

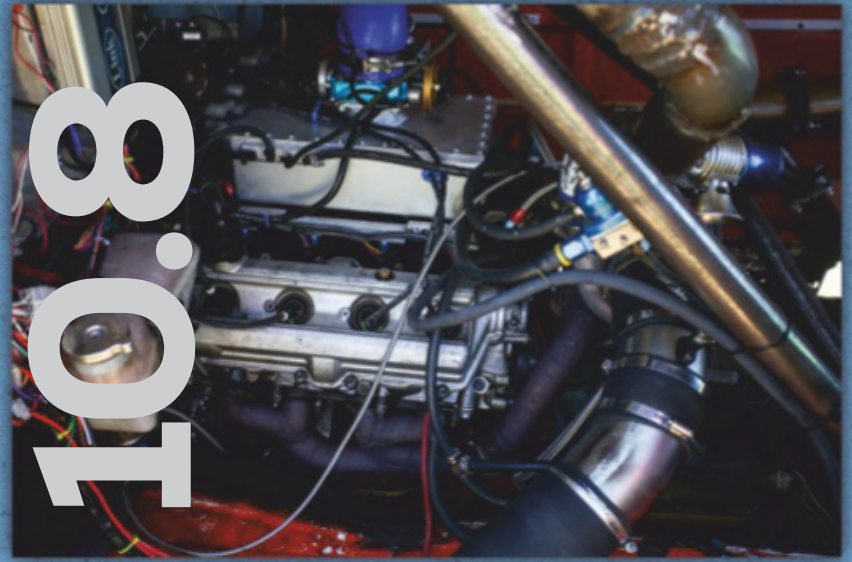


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While this great nation of ours may have wholeheartedly embraced the metric system of measurement long, long ago, there are still a few remnants of the imperial era remaining, and you'll find damn near all of them deeply ingrained in the age-old sport of drag racing. It's a sport that has been around since the dawn of time, and it has always measured tyre sizes wholly in inches, power to the nearest horse, torque in foot-pounds, speed in miles per hour, and regarded the only distance that actually means two-tenths of anything as the quarter-mile. Running the strip has long stood as the ultimate test of truly quick cars, and, to this day, it remains the place where benchmarks are set for those looking to claim the glory of being the best.



1970 Commer PB

Name: Tim Hawke

Location: Auckland

Personal best: 10.8@121mph (195kph)

POWER TRAIN: Toyota 1UZ-FE, 3968cc, V8; forged low-compression pistons, forged rods, Garrett GT35 turbo, two-speed Powerglide automatic, high-stall converter, Hilux LSD

TYRES: 255/50-16 Hoosier DOT drag radial

POWER: 410kW on 13psi

How long have you been drag racing?

Forty-five years! It took 40 until I won a Nationals, and then I did it three years back to back.

What do you enjoy about the drags?

The fun factor — it's a simple sport, you don't need to bring many tools; just park up, watch people blow shit up, and enjoy.



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For the past 24 years, the 4&Rotary Nationals drags has been holding it down for the quarter-mile-loving import scene — from the days of raucous rotangs and all-wheel-drive terrors from the triple triangle, to the reign of the GT-R and 2JZ-powered anything. So, while the sport itself may have gone through fluctuations of popularity over the years, with some choosing to attack corners with full grip and others choosing to do the same with next to none, the event has been cemented as a calendar staple start to the year for longer than most of you have held a license.

1992 Nissan Skyline GT-R

Name: Dave Duncan

Location: Otaki

Personal best: 10.8@136mph (219kph)

POWER TRAIN: RB26DET, 2568cc, straight-six; forged pistons, forged rods, T04Z turbo, HKS intake kit, five-speed, four-wheel-drive manual, OS Giken gear set, billet centre plate, HKS triple-plate clutch, OEM rear LSD

TYRES: 255/45R17 Nankang

POWER: 450kW

How long have you been drag racing?

Over 30 years; I've been racing this car since 1999.

What do you enjoy about the drags?

Beating the young fellas — I turned 60 the other day!





1999 Ford 23T altered

Name: Roy Bingley

Location: Auckland

Personal best: Yet to complete a full pass;
1.15-second 60-foot

POWER TRAIN: Holden (Nissan) RB30ET, 3000cc, straight-six; forged pistons, forged rods, Kelford Cams camshaft, BorgWarner AirWerks S400SX3, two-speed Powerglide automatic transmission, Strange alloy Ford LSD

TYRES: (F) 22x2.5 Hoosier Front Runner, (R) 33x160x15 Goodyear Eagle

POWER: Yet to be dynoed

How long have you been drag racing?

Woah, I would have started back in 1990 — maybe earlier. I've been away for 15 years and just come back. This car has only done five passes.

What do you enjoy about the drags?

It's the buzz. I've done circuit racing, I've done off-road racing, go karting — drag racing is the only one where you get out of the car shaking like a leaf. It's so fast and it isn't just driving in a straight line.



Mitsubishi Evo VIII (tube frame)

Name: Nick Reiri

Location: Masterton

Personal best: 7.65@170mph (274kph) (41psi with boosting issues)

How long have you been drag racing?

A long time, since I was 16 years old, really — racing all sorts of shitboxes.

What do you enjoy about the drags?

Beating the V8s, to be honest! The atmosphere and, because it's one of the original motor racing sports, it's been happening forever; the most extreme sport you can push a car in.



POWER TRAIN: Stu Lawton—built 13B semi-peripheral-port, Cosmo block, S4 turbo rotors, Precision Engineering short crank, SCR methanol seals, Garrett GT55 91mm turbo, 12 2200cc injectors, MoTec M800, Lenco CS3 air-shifted five-speed gearbox, nine-inch Strange alloy head, custom housing, 40-spline Mark Williams gun-drilled axles

TYRES: 4.5x22 front runner, 32x14x15 Mickey Thompson slick

POWER: 633kW at 8000rpm on 35psi (745kW capable)

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Held at Meremere Dragway on Sunday, 3 March, the 2019 4&Rotary Nationals Drag Day saw near on 150 cars flood through the gate with multiple single-digit passes being thrown down on the VHT-laden track. The fastest pass of the event went to Nick Reiri in the 13BT-powered tube-frame Mitsubishi Evo VII, who threw down a 7.65 at 170mph [274kph] while chasing boost issues in fourth and fifth gear — Nick tells us that the current 41psi feed package should have it down into the low sevens once boost in the higher gears is sorted out, and it will eventually see the six-second bracket when the wick is turned up even higher.

In case you missed seeing all that radness, we've taken a closer look at eight of the most lethal cars from the day here.



1996 Mazda RX-7 FD

Name: Max Flower

Location: Auckland

Personal best: 11.1

POWER TRAIN: 26B bridgeport, 2600cc, four-rotor; BorgWarner S400SX, twin Turbosmart 65mm wastegates, five-speed Green Brothers Racing TKO-600, Tilton triple-plate

TYRES: 315/30R18 Advan A048

POWER: 450kW on 7psi (run-in tune)

How long have you been drag racing?

This is the first time on the new set-up.

What do you enjoy about the drags?

The speed — the car's perfect now; doesn't blow axles or diffs ... just run it.





1989 Honda Civic EF

Name: Haroon Memon
Location: Auckland
Personal best: 11.7@126mph (203kph)

POWER TRAIN: Honda B16A, 1600cc, straight-four; sleeved block, forged pistons, forged rods, Turbonetics T67 turbo, five-speed manual, Top Fuel straight-cut gear set
TYRES: 26x9.5 Hoosier Quicktime Pro
POWER: 354kW on 20psi

How long have you been drag racing?
 I've owned the car 10 years now; this is the fifth pass it's done at the drags.

What do you enjoy about the drags?
 Simple: the adrenaline rush, the speed!



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1975 Mazda 808

Name: Robbie Longley

Location: Matakana

Personal best: 10.6 seconds at 129mph (208kph)

POWER TRAIN: Green Brothers Racing 20B peripheral-port, 2000cc, three-rotor; six-speed

TTi sequential Quartermaster twin-plate clutch, Hilux 5.8:1 LSD, billet axles

TYRES: (F) 3.6/24-15 M&H Racemaster, (R) 235/60-14 M&H slick

POWER: 343kW

How long have you been drag racing?

One year.

What do you enjoy about the drags?

The burnout and the launch — yeah, definitely the launch, bringing it up to revs and banging through the gears.



2003 Mitsubishi Evo VIII

Name: Ifraz Beggz

Location: Auckland

Personal best: 10.2 seconds at 133mph (214kph)

POWER TRAIN: Mitsubishi 4G63, 1998cc, straight-four; GSC 2.2-litre stroker kit, Garrett GT3582R, T04Z 1.00 rear housing, billet compressor wheel, factory gearbox, OEM RS rear LSD

TYRES: 235/40R18 Westlake semi-slick

POWER: 511kW on 30psi

How long have you been drag racing?

Five years total.

What do you enjoy about the drags?

The people, working as a team. If someone breaks something, we run over and help out. That one-man-army shit is all good, but being in a team knowing you have that support is different. It makes it more fun and you can go harder.



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NATURAL SELECTION

WORDS: JADEN MARTIN PHOTOS: ADAM CROY

THIS EVO III RS PACKS GENUINE RALLYING HISTORY, DESPITE NEVER HAVING SEEN A SINGLE PIECE OF GRAVEL, AND CRANKS OUT A POWER FIGURE THAT WOULD PUT MODERN-DAY WRC CARS TO SHAME



RS



AS THE EVO III WAS NEVER SOLD NEW HERE, THIS IS ONE OF THE ONLY NZ NEW EXAMPLES, AS IT WAS IMPORTED BY RALLIART NZ IN 1995 ALONG WITH TWO OTHERS, ALTHOUGH IT NEVER SAW RACE MILES UNLIKE THE OTHER TWO WHICH CONTESTED THE '95 NZ RALLY SEASON.

There was once a time, which almost seems a distant memory now, when Japanese manufacturers cranked out back-to-back performance models as they took swings at their rival brands over the boardroom table in the pursuit of automaker supremacy. These bloody battles extended to the proving grounds of motorsports the world over, and many now-priceless examples of automotive steel were sentenced to the crushers to ultimately become whiteware as a result of these exploits. These low number, stripped-out motorsport models were practically given away to anyone willing to pump serious amounts of development into their otherwise base-model chassis that packed top-spec running gear, strap themselves into the driver's seat and attempt to bring fame to that brand's name — and no discipline saw more examples than the unforgivingly brutal gravel stages of world rallying.

You either made it big or failed miserably and got sent home with little to show for it. Mitsubishi knew this better than anyone, having campaigned its Evolution line under the 'Ralliart' moniker to great highs — clinching driver's titles in four-consecutive seasons (in an Evo III, IV, V, and VI) — and the lows of destroying factory loads of cars and losing its grip on more titles than internal records will ever care to admit. It was these highs and lows that forged the Evolution's reputation as one of the most formidable performance chassis known to man, with the holy-grail RS option becoming almost impossible to obtain, as most were lost to the depths of factory-backed and privateer rallying campaigns.

So, when the chance to buy a genuine RS came up for long-

time Evo enthusiast Donal Singh, he couldn't get the word 'sold' out of his mouth fast enough. Having formed a deep love for the Evo platform, he's owned more examples than you can count on your two hands, and this '95-spec Evo III RS has been the crown jewel of his collection since 2010. Purchased in near-stock form, the car was in surprisingly good condition — almost too good to believe that it was a genuine RS. Donal was convinced that, if it were the real deal, it surely would have seen some time on the gravel. But the car showed no signs that it had ever carved up a gravel-laden country road in its life.

Donal reached out to the local arm of the manufacturer to see what information could be dug up from the archives and discovered that it was, in fact, the real deal, one of a handful of New Zealand-new examples that had been ordered from Mitsubishi Japan by Ralliart NZ back in 1995 to be used in its rally programme. The car was relegated to being a spare for the 1996 season in the event that one of the primary cars got destroyed, though that scenario never eventuated, and, by 1997, the team had upgraded to the newly released Evo IV. The spare, having served its purpose, was sold to a private owner and spent its time before ending up in Donal's hands as a humble street car.

"It was always that dream car. I once owned a Subaru back in the early 2000s, did everything you do to them, and it blew up. I went and bought an Evo right then and have never gone back," explains Donal. "I've now owned over 10 of them. There's something about how mechanical the earlier Evos are — no fancy electronics or extras — especially the RS."





HEART

ENGINE: Mitsubishi 4G63, 1998cc, straight-four

BLOCK: Manley forged crank, Wiseco forged pistons, Molnar Technologies rods, modified oil pump, balance-shaft delete, Fluidampr crank pulley, ACL Race Series bearings, ARP fasteners

HEAD: Ported-and-polished; Ferrea 1mm oversized valves, Kelford TX284 exhaust camshaft, Kelford TX280 intake camshaft, Kelford Beehive valve springs, Kelford titanium retainers, Kelford adjustable cam gears, ARP 624+ custom head studs and washers

INTAKE: Magnus V4 manifold, S90 74mm billet throttle body, Sinco four-inch intake pipe, K&N air filter

EXHAUST: Sinco three-inch lobster-back downpipe, four-inch stainless-steel straight-pipe system, Adrenalin R muffler

TURBO: Garrett GTX3582R, TIAL 0.82 V-Band stainless-steel exhaust housing, JM Fabrications stainless-steel top-mount manifold

WASTEGATE: TIAL 44mm MV-R

BOV: TIAL Q 50mm

FUEL: DeutschWerks 320-litre-per-hour in-tank lift pump, twin Bosch 044 primary pumps, custom two-litre surge tank, Bosch 1650cc fuel injectors, Haltech flex-fuel sensor, Aeromotive fuel-pressure regulator, Magnus 1000hp fuel rail, 8AN Teflon-braided fuel line, 8AN fittings

IGNITION: NGK iridium plugs, Denso coil-on plug

ECU: Haltech Elite 1500

COOLING: Treadstone 1000hp intercooler, Sinco three-inch alloy intercooler piping, AFco Race Series alloy radiator, 20AN stainless-steel braided coolant lines, Setrab 18-row oil cooler, 10AN oil-cooler lines

EXTRA: Sinco stainless-steel turbo oil-return line, 6AN braided oil and water turbo lines, Haltech 4bar external map sensor, Haltech thermocouple amplifier, Haltech wideband controller, Haltech electronic boost solenoid, HKS turbo timer, Real Street oil catch-can, relocated fuse box, deloomed engine bay



DRIVELINE

GEARBOX: Evo III RS five-speed manual

CLUTCH: Competition Clutch 7.25-inch twin-plate; forged clutch fork

FLYWHEEL: Competition Clutch lightweight

DIFF: Factory Evo III RS limited-slip diffs

SUPPORT

STRUTS: BC Gold coilovers

BRAKES: (F) four-pot Evo VIII Brembo calipers, (R) Factory

EXTRA: Hardrace adjustable rear camber arms, Cusco front strut brace, Cusco rear strut brace, 5x114.3 hub conversion

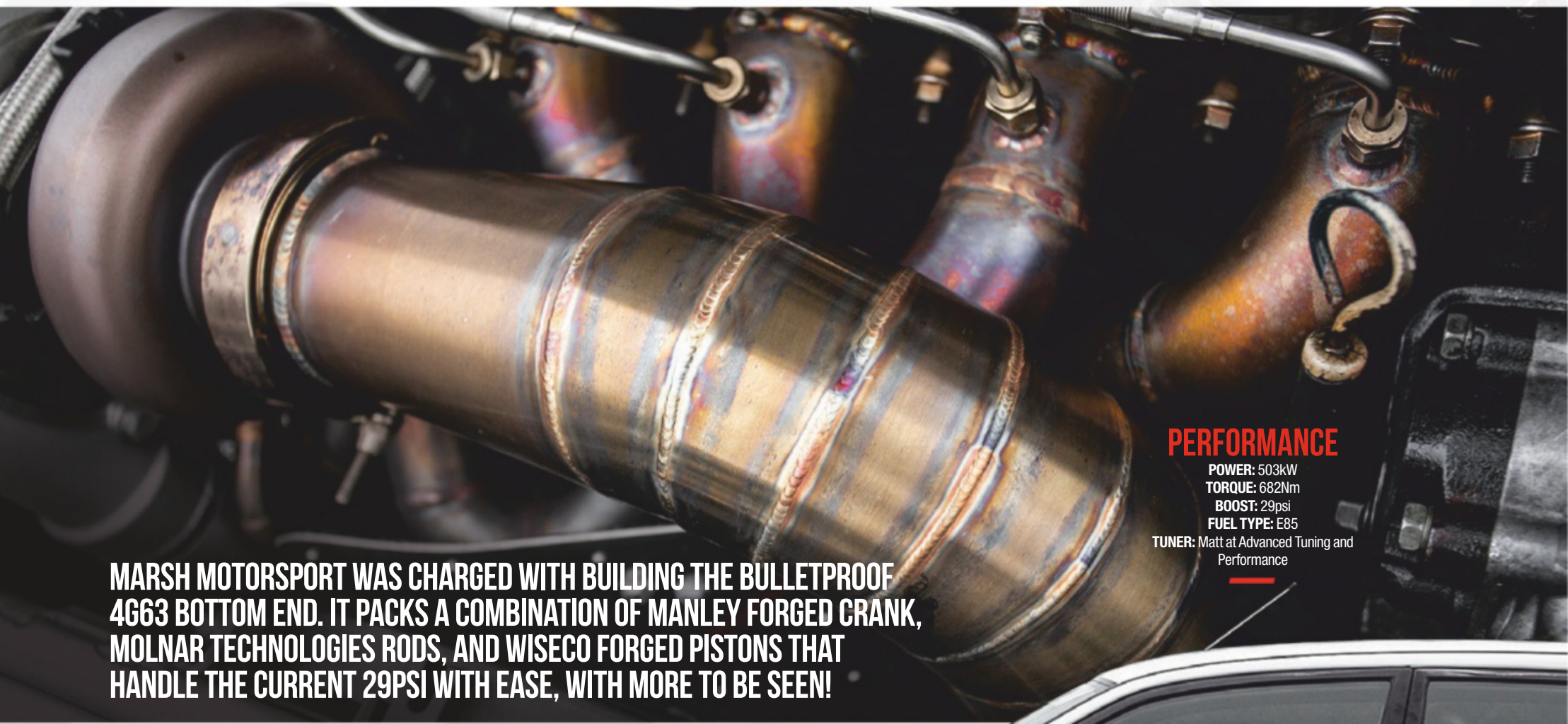
RS

SUCKING DOWN E85, THE FUEL SYSTEM MAKES USE OF TWIN BOSCH 044 PRIMARY PUMPS THAT FEED BOSCH 1650CC FUEL INJECTORS ON A MAGNUS FUEL RAIL, AND A HALTECH FLEX-FUEL SENSOR MEANS THAT WHEN FRESH CORN JUICE ISN'T AVAILABLE, 98 OCTANE CAN BE SUBSTITUTED WITHOUT ISSUE



And he's correct about that. The RS sacrifices comfort and gadgets in the name of saving weight, denting the dirt at just 1260kg — coming without sound deadening, a boot liner, ABS, rear wiper, or interior vanity mirrors, and even the door handles and wing mirrors are devoid of paint weight. Imagine putting a standard Evo III on a serious diet while retaining the same amount of power — lethal! For Donal, the Evo has been a constant conflict between maintaining the car's originality and modifying it to garner more power: "I've struggled to keep the OEM look in my nine-plus years of ownership. Every time I read [NZ Performance Car] magazine or saw a modified Evo I to III at a show, I'd be eager about doing the same to mine. I eventually gave in, which was the result of the motor showing signs of the notorious Mitsi lifter tick — I just got carried away trying to improve everything."

Before you start to sweat over the thought of bastardizing a matching-numbers car, you should know that Donal thought about that, tucking the original heart away in the garage to ensure that when the lust for power wears off, it can be returned to factory. To take its place for now, a second Evo III 4G63 was sourced, and Donal took the reins to curate the package. The bottom end got packed with the strongest components he could get his hands on: a Manley forged crank, Wiseco forged pistons, Molnar Tech rods, and a ton of machine work at Marsh Motorsport — all in the name of piecing together a bulletproof base that would see the bores tickled by more than 30psi of boost. That same ethos was extended to the ported-and-polished head, where you'll find oversized valves and Kelford's finest billet camshafts and valve springs with titanium retainers.



MARSH MOTORSPORT WAS CHARGED WITH BUILDING THE BULLETPROOF 4G63 BOTTOM END. IT PACKS A COMBINATION OF MANLEY FORGED CRANK, MOLNAR TECHNOLOGIES RODS, AND WISECO FORGED PISTONS THAT HANDLE THE CURRENT 29PSI WITH EASE, WITH MORE TO BE SEEN!

PERFORMANCE

POWER: 503kW

TORQUE: 682Nm

BOOST: 29psi

FUEL TYPE: E85

TUNER: Matt at Advanced Tuning and Performance

EXTERIOR

PAINT: OEM Scotia White

ENHANCEMENTS: OEM Evo III RS trim, 35-per-cent 3M window tints





INTERIOR

SEATS: OEM Evo III RS vinyl
STEERING WHEEL: OEM Momo
INSTRUMENTATION: Auto Meter
Phantom Series boost gauge



SHOES

WHEELS: 18x8-inch Compomotive
TYRES: 215/35R18 Toyo T1R

On the outside, very few factory components remain bolted on, the intake replaced by a Magnus V4 unit with S90 74mm billet throttle body and a JM Fabrications stainless-steel top-mount manifold allowing the factory TD05 huffer to be upgraded to the ever-popular Garrett GTX3582R. Donal opted to switch out the rear housing on the GTX to a TiAL 0.82 V-Band stainless-steel unit in favour of a quicker spool, the 4G remaining un-stroked in two-litre form.

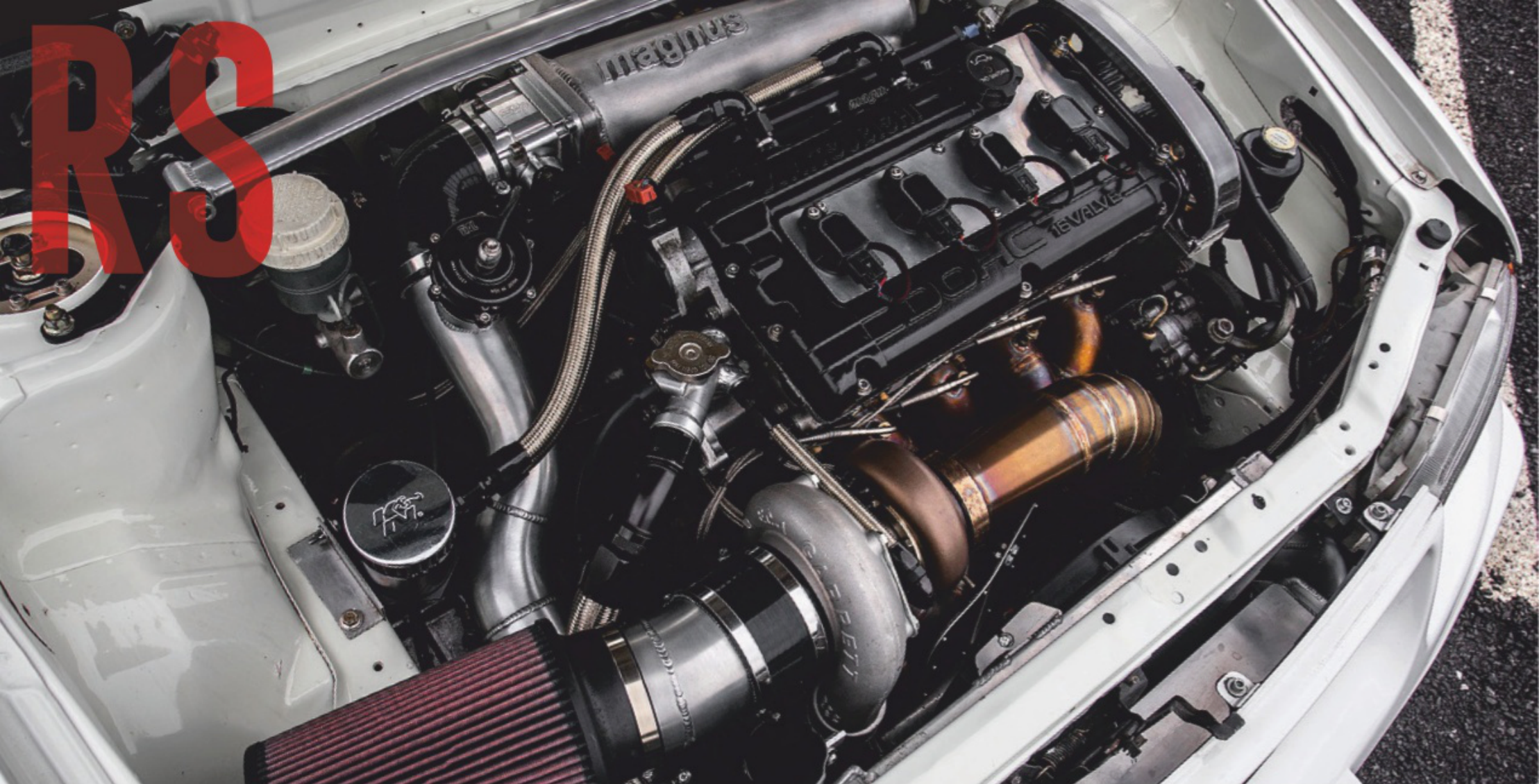
The remainder of the spec list reads like a who's who of the performance world, with Bosch fuel componentry, Sinco pipework, and a Haltech Elite 1500 to control the party.

When it came time to tune the car, what was expected to be a humble figure was quickly surpassed on the first whirl on the dyno. "I took it down to Matt at Advanced Tuning and Performance, where it made 381kW on only 24psi running 98. With E85 on the pump right behind the shop, and everything sorted to run ethanol, Matt suggested we chuck some in and see what it will do."

"The boost was slowly turned up to 29psi, where it flashed up 503kW on the screen and still wasn't pushing the motor or running gear," Donal tells us. "We stopped there, because 500kW is already plenty, but if we up the boost some more and move to a CDI [capacitor discharge ignition] for stability, it could easily make more."

Despite cranking out a metric shit-ton of kilowatts from the two-litre powerhouse, the factory Evo III RS five-speed gear-swapper has taken all that fun in its stride. The only upgrades in the driveline consist of a Competition Clutch twin-plate-and-flywheel combo, with a forged clutch fork!

And while you may find a few aftermarket adjustable arms, a set of BC Gold coilovers, and a pair of Evo VIII Brembo clampers underneath, Donal has done well to maintain the bones of what is otherwise a pretty historic car. The exterior remains completely untouched — even the original Scotia White paintwork remains. The only difference from the RS factory form and Donal's example is the lower ride height — something that we know no one whatsoever



would complain about — and the OZ Racing-inspired aero fin wheels. Donal explains that, even with a 500kW donk sitting in the engine bay, the wheels were the hardest part of the car's build.

"It's been my best-kept secret. The OZ Racing rally wheels that they pay homage to never came in 18-inch diameter, so it took a great deal of research and risk-taking to have them manufactured under a special order from Compomotive Motorsport Wheels in the UK," he admits. "It took over nine months of pushing the manufacturer to produce a set that would fit the Evo and the need to do a five-stud conversion. As much as they aren't the real thing, they are identical to the classic 15-inch OZ Racing wheels found on Evo III WRC cars but with the flush fitment I had wanted to achieve."

So, while Donal may have caved on his quest to keep his RS as it was when it left the ownership of Ralliart NZ, it's undoubtedly been a worthwhile venture that has seen the car paying homage to its rallying roots with an OEM-plus style. And should the urge to revert it occur, this can easily be done thanks to Donal's meticulous storage of every original piece removed, right down to every last nut and bolt. But, really, how could you get tired of having more power than ever anticipated for a in a chassis designed for serious pedalling at the factory? Yeah, we wouldn't, either.

DRIVER PROFILE

DRIVER/OWNER: Donal Singh
AGE: 37
LOCATION: Auckland
OCCUPATION: Business systems analyst
BUILD TIME: 1.5 years
LENGTH OF OWNERSHIP: Nine years

THANKS: Mike at Sinco, Matt and the crew at Advance Tuning and Performance; Ken, Vorn, Edwin and Rickey, along with everyone else who's lent a helping hand or motivation to get it to where it is today.



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LIFE IN THE FAST LANE

WORDS: JADEN MARTIN

DETAILING THE LEGACY OF THE MAN WHO FOUNDED ONE OF THE BIGGEST-AMBITION TUNING POWERHOUSES, JUN AUTO, WHICH DOMINATED DAMN-NEAR EVERY DISCIPLINE IT ENTERED

Sadly, the founder and creative mind behind the legendary JUN Auto, Junichi 'Jun' Tanaka, passed away at the age of 76 on the morning of 5 March 2019. His passing followed complications from a short battle with cancer. While he was a man who liked to stay out of the limelight, preferring to let his work reflect his thoughts, Junichi leaves behind a legacy of bright yellow, race-winning and record-breaking vehicles that dominated multiple disciplines, along with a stable of high-performance demo cars and a serious range of battle-tested components, all engineered

and perfected in the heat of racing under his leadership.

Born in 1943, Junichi was part of a family of metalsmiths whose Tanaka Industrial Co. was founded in 1946 when Junichi was just three years old. The company initially specialized in internal-parts processing before moving on to manufacturing engineering instruments and industrial confectionery machines. By 1955, the company had begun manufacturing two-stroke engine and body parts for motorcycles, and, only five years later, it started designing and manufacturing automotive four-stroke engines and body parts.





Junichi
Tanaka
1943-2019



Growing up around the plant, Junichi started picking up the family trade from a young age. He worked in and around the plant until March 1980, when he founded JUN Machine Shop, a division of Tanaka Industrial that would be dedicated to developing and manufacturing performance car parts.

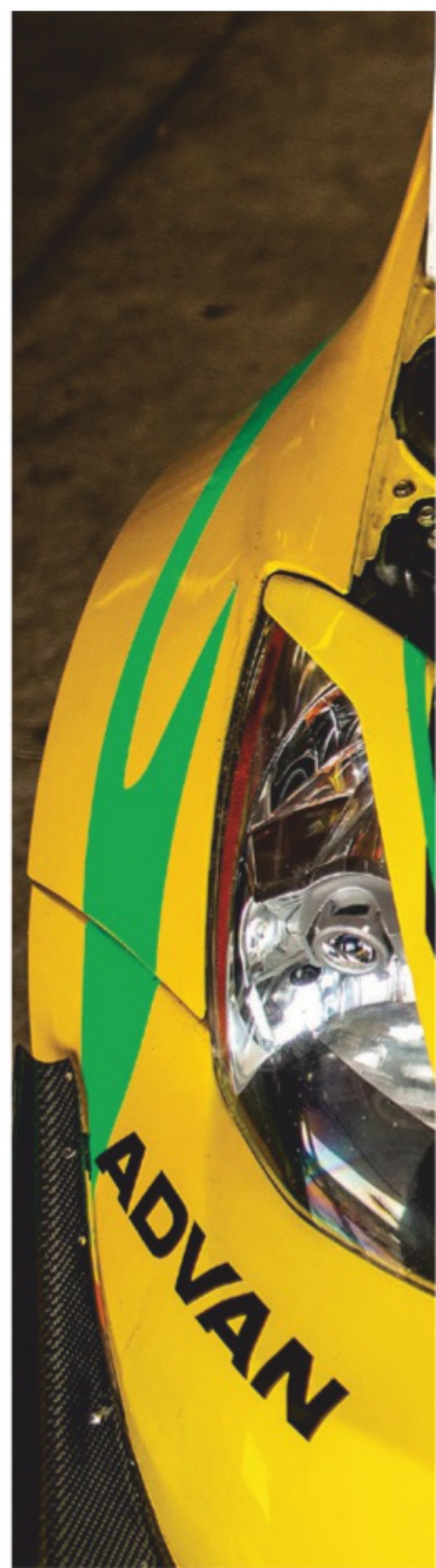
Junichi spent the next two years designing, testing, and perfecting the first product to be released under the brand: a 3.5-litre stroker kit for the popular Nissan L-series straight-six. To show the stroker kit's capability, Junichi purchased an S30 Fairlady Z that was converted into a drag car, marking the first of many successful product demo cars and the early love of straight-line performance that would be seen again in later years.

The kit proved fairly popular among local L-series enthusiasts, and, by 1985, right when the turbo era was really kicking off, Junichi had developed a twin-turbo system that, when paired with a 3.4-litre version of the L-series stroker, was good for 350kW! The shop's demo car would later run a pass of

13.53s at 114mph (183kph), according to the January 1986 issue of *Option* magazine.



Junichi expanded his empire in June 1985 with the opening of JUN Auto Works, a body-fabrication and paint shop that was aimed at expanding the company's capabilities to building custom composite bodies for the race cars. Why? It would allow Junichi to take on a unique challenge that the Japanese had yet to find success in: setting land-speed records at the Bonneville Salt Flats in the US. There was no similar landscape to Utah's ancient lake beds on Japanese soil, and, for many back home, simply racing there would be considered a tremendous accomplishment. It was another five years before Junichi finally launched his land-speed campaign, heading stateside in 1990 armed with a modified Z32 Fairlady Z and, with long-time JUN tuning guru — now head of Koyama Racing — Susumu 'God Hand' Koyama behind the wheel, smashing out a 228.308mph (367.416kph) run.



“ JUN AUTO BUILT A REPUTATION FOR BEING ABLE TO CONVERT ANY STREET CAR INTO A HEAVILY MODIFIED, FOUR-FIGURE POWER-MAKER



That first taste of salt would see Junichi return home and immediately establish JUN Auto Mechanic, a brand designed to unite the JUN Machine Shop and JUN Auto Works divisions under one umbrella. JUN Auto would go on to become a one-stop tuning shop that built a reputation for being able to convert any street car into a heavily modified, four-figure power-maker.

At the same time, Junichi had been whispering ideas into the ears of the executives of Japanese tuning house Blitz — ideas of returning to the lake beds with an even more potent Z32. It would sport a full aero front end developed in-house at JUN, and have over 700kW on tap. Koyama threw down a record-setting 260.88mph (419.84kph) run for the E/BGMS (3.015- to 4.276-litre) class — a record that still stands today!

JUN and Blitz crossed the Pacific again in 1993, headed for Southern California's El Mirage lake bed, with a BNR32 GT-R. Piloted again by Koyama, the car set a world record in the E/BGCC class with a 194.6mph (313.2kph) run; it also remains unbeaten. Running under the E-category, which is for 3.015- to 4.27-litre engine capacities, JUN had fitted one of its stroker kits to the RB heart to qualify.

The company also holds a third record at Bonneville that it received with an R33 Skyline driven by *Option*, Tokyo Auto Salon, and D1 Grand Prix founder Daijiro Inada, with a 233.217mph (375.326kph) hit in the E/BGCC class in 1997.





THE COMPANY REMAINS ONE OF THE MOST SOUGHT-AFTER SUPPLIERS OF PARTS SUCH AS BILLET CRANKS FOR THE R35

However, it wasn't just Junichi's record-breaking land-speed campaigns that made him and his company so impressive; it was that JUN Auto wasn't a one-trick-pony company. Junichi simply wasn't satisfied with being the best at one discipline; JUN Auto needed to compete and succeed in all manner of motorsports — from drag racing and Time Attack, to drifting and rally. To show how well JUN could bolt a car together, Junichi was a big fan of producing twin cars on the same chassis but set for very different disciplines. The most notable of these is a pair of GC8 Imprezas that on the surface look near-on identical, with one destined for the circuit and the other to carve up rally stages. The circuit-spec car broke Tsukuba's lap record with a 58.422-second lap; meanwhile, the rally-spec car competed in the World Rally Championship (WRC) Rally New Zealand, where it finished with a respectable 4h 36min 13.7s total time (with a 20-minute penalty applied!).

JUN's list of achievements seemingly never stopped, as it churned out an endless succession of signature yellow monsters that each turned the tuning world on its head. Its Hyper Lemon Mitsubishi Lancer Evo V went to Germany to compete in both Time Attack racing and drifting — finishing fourth and first, respectively — before heading to Hong Kong, where it set the Zhuhai International Circuit lap record, and then returning to Japan to break the company's own Tsukuba record with a 55.976-second time.

JUN's 1.8-litre stroker B16A-powered EK4 Civic once held the title of the world's fastest Honda drag car, and cut an impressive all-motor 62-second lap around Tsukuba Circuit. Its 500kW S14 set an import drag racing record in the US with a 8.887-second quarter-mile pass. The company won an *Option*-sponsored Silvia World Championship in an S13, campaigned an SR20-powered R32 Skyline in the Japan Touring Car Championships (JTCCs), and

went back to Bonneville in 2001 with a street-legal (US) Akira Supra that broke the 249mph (400kph) barrier!

Throughout the company's success, Junichi remained the driving force behind each new venture. He was responsible for almost all of the company's products, which, to this day, are still considered to be of the highest quality, and span the range from small components, such as springs and retainers, gaskets and water pumps, to forged and stroked internal kits, aero packages, drivetrain upgrades, and entire crate motors.

JUN may not be the biggest name in the game — a purely intentional strategy implemented through networking and partnership with notable performance companies and race teams from around the world that push JUN products so that more time can be spent racing (or 'product testing', as Junichi would call it) — but what Junichi produced for and opened the doors to in the import tuning world is unparalleled. The company remains one of the most sought-after suppliers of parts such as billet cranks for the R35, and modern-day versions of its cars are still competing, with the likes of the Hyper Lemon 350Z R driven at the 2018 World Time Attack Challenge by Eiji 'Tarzan' Yamada.

Junichi Tanaka's life was evidently dedicated to the pursuit of automotive perfection, and his passing is a monumental loss to the tuning world. While he may longer be here to conjure up his next speed attack, his legacy will live on through the company that he built from scratch, which is now in the safe hands of his son, Kei Tanaka, and all the bright yellow JUN Auto-built cars that live around the globe.

We hope that there is an endless supply of tools, stroker kits, base chassis, and terra firma to drive it all on wherever you may be, Tanaka-san.





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VEHICLES HAVE EVOLVED.

ISN'T IT TIME BATTERIES EVOLVED TOO?

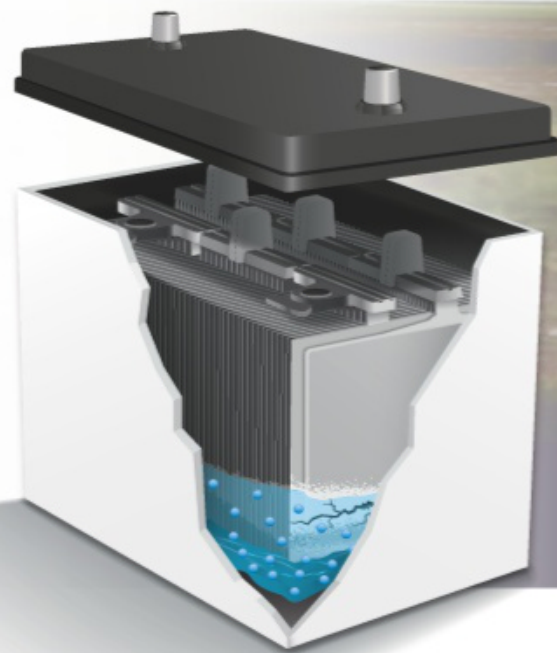
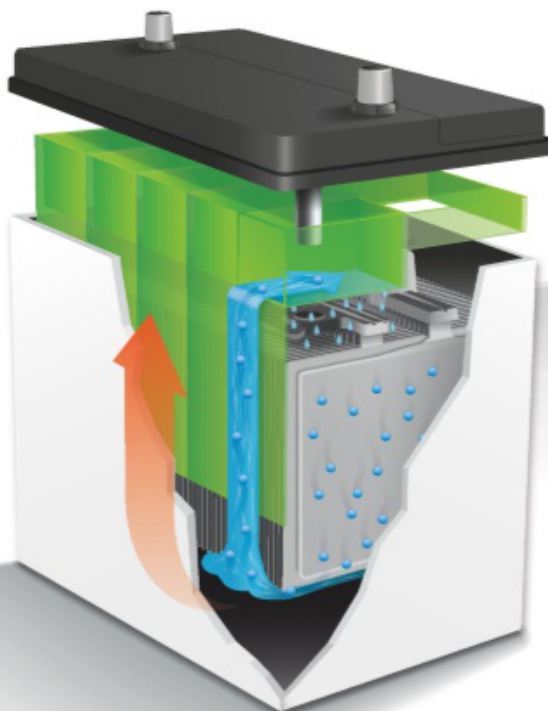
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I N H E R V E I N S

FORGET TEA PARTIES AND PLAYING WITH DOLLS; AS A KID, CLAIRE EVELEIGH WANTED TO HEAR THE SOUND OF A RAUCOUS ROTARY RATTLING HER EARDRUMS. THE RESULT IS ONE SLICK FD RX-7

WORDS: JADEN MARTIN PHOTOS: DANNY WOOD



—1992 MAZDA RX-7 (FD3S)—



HEART

ENGINE: Mazda 13B bridgeport (JC Cosmo), 1308cc, two-rotor
BLOCK: Bridgeported plates
INTAKE: Custom intake pipe
EXHAUST: Custom three-inch system, PAC Performance mufflers
TURBO: Garrett GT3582R, Sinco manifold
WASTEGATE: TiAL 60mm
BOV: Twin Racepro
FUEL: Bosch in-tank fuel pump
IGNITION: MSD leads, Denso race plugs, NZEFI coils
ECU: Link G4+ Storm
COOLING: Fenix front-mount intercooler, custom piping

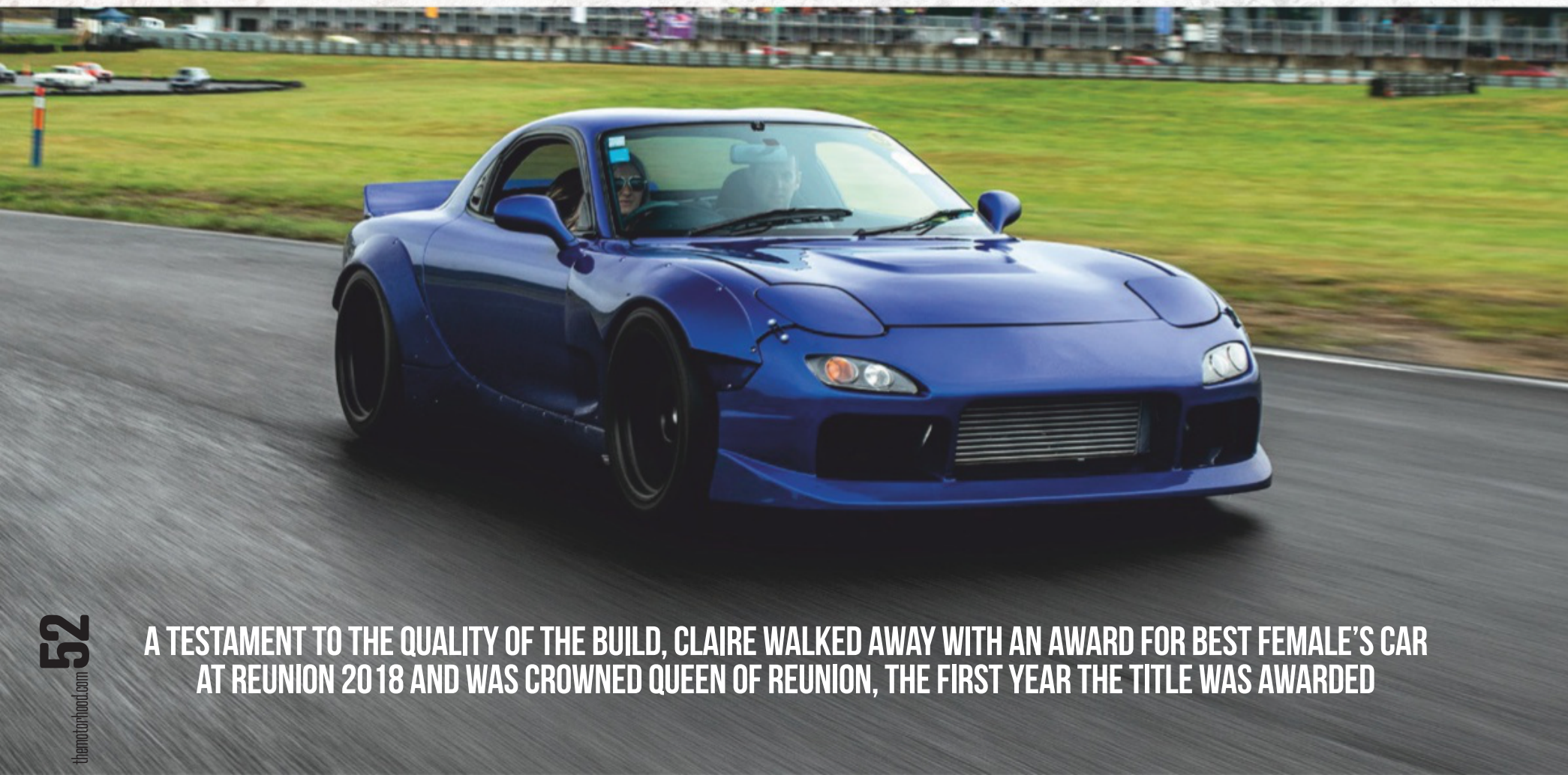
Growing up, most girls are force-fed a selection of dolls, teddies, and pretend homewares to play with. You'll struggle to find a bedroom that hasn't been repainted in various tones of pink and purple, and those brightly coloured walls are almost always plastered with posters of the latest pop singer. Free time? That's spent hosting imaginary tea parties and playing dress up. Meanwhile, the boys are outside in the mud getting dirty, trying to work out what the hell dad's tools actually do, and hooning Hot Wheels cars around that quintessential Kiwi road rug that everyone seemed to own. That's just how it goes — because, for some people, we're still living in the 1950s — that is, unless your name is Claire Eveleigh.

For Claire, childhood was spent roadside at local hill climbs or in the pits at track days with her dad and uncle as they raced the family RX-3. Premix was in her blood before she even knew it, and she had that love of all-things four-wheeled, especially of

the rotang variety, instilled in her from day dot. Forget pouring tea and eating pretend scones; all Claire wanted to do at playtime was slap gears and go fast like her dad and uncle!

"So, yeah, I've always been into cars, and all I've ever really been interested in was owning rotaries! The sound and feel of driving a rotary is unlike anything else," she says.

When her teenage years rolled around, it didn't take long for Claire to race down to the local transport office and take the test to get a driver's license. That was even more quickly followed by the purchase of her first spinning Dorito — an RX-3 coupe! That car would end up being sold in 2007, as Claire and her husband, Jaysen, looked to buy their first house — although, their ownership and building of cars never stopped, as they both shared a strong addiction to petrol fumes and getting grease under their fingernails. That common interest would be the catalyst that led to the purchase of Claire's current labour of love, this '92-spec FD RX-7.



A TESTAMENT TO THE QUALITY OF THE BUILD, CLAIRE WALKED AWAY WITH AN AWARD FOR BEST FEMALE'S CAR AT REUNION 2018 AND WAS CROWNED QUEEN OF REUNION, THE FIRST YEAR THE TITLE WAS AWARDED



"I've always loved the look of batties, and Jaysen had never owned a rotary before," explains Claire. "In 2014, we found this RX-7 for sale sitting in a shed in Invercargill. It was waiting for some much-needed attention. The factory 13B was still in it but had low compression, and the idea was to build a simple street car for weekend driving."

The first thing to address was that spent factory hunk of metal that was squatting in the engine bay. Rather than bother tearing down and rebuilding the low-compression 13B-REW, Claire and Jaysen opted to rid the car of it in favour of a 13B-RE from a JC Cosmo, which is hailed for being endowed with the largest side ports of all later model rotary engines and offered a larger HT-15 primary and smaller HT-10 secondary sequential twin-turbo system. While the factory unit offers a manufacturer-claimed output of 175kW at the engine, Claire's now makes almost double that at the rears with a super simple and reliable package.

DRIVELINE

GEARBOX: FD RX-7 five-speed

CLUTCH: OEM

FLYWHEEL: OEM

DIFF: Factory limited-slip

SUPPORT

STRUTS: Tein Flex coilovers

BRAKES: (F) Four-pot calipers,
(R) single-pot calipers

EXTRA: Hardrace adjustable
rear lower control arms,
Hardrace adjustable rear
traction rods, chrome powder-
coated half-cage

IT MAY HAVE ONCE WORN A NO-NAME
KIT AND CHEAPIE 20-INCH WHEELS, BUT
THE FD IS NOW CLAD IN A SUPER-WIDE
ROCKET BUNNY THAT SWALLOWS THE HEFTY
19X10-INCH (-35) AND 19X11-INCH (-47)
WORK GNOSIS GR203S





INTERIOR

SEATS: Factory
STEERING WHEEL: Sparco

Stu Lawton was charged with bridgeporting the plates and screwing everything together, while the twins were later ditched for a single Garrett GT3582R huffer that sits atop one of Sinco's finest.

The injectors have been ramped up to 1050cc and 1750cc Injector Dynamic units, and a Walbro pump lives inside the factory tank. Spark is delivered via Denso plugs and NZEFI coils, and the whole show is controlled by a Link G4+ Storm. With Chris Wall at Prestige Tuning and Motorsport plugged into the ECU and the car bolted to the Dynapac pods, the RX-7 was good for just shy of 300kW at the wheels on just 16.7psi

"Once it was tuned and running well, we sourced an aftermarket front bumper and side skirts, and chucked some cheap 20-inch wheels on it," Claire tells us. "Remember, it was

only meant to be a simple street car. They were on it for about a year, but, one weekend in mid 2017, after we had done the new single-turbo upgrade, I was running the car at a 4&Rotary event at Hampton Downs, and a side skirt came off just before the front straight and was quickly destroyed by some poor bastard behind me."

Rather than go about trying to find a replacement to suit the remaining unknown-brand side skirt, Claire took the opportunity to revamp the exterior aesthetics in a style that was blowing up the Internet at the time — an FD iteration from famed fibre-reinforced-plastic (FRP) artisan, Kei Miura of Rocket Bunny: "I blame too many nights browsing car accounts on Instagram and falling in love with the Rocket Bunny stance," Claire laughs.

SHOES

WHEELS: (F) 19x10-inch (-35) Work Gnosis GR203,
(R) 19x11-inch (-47) Work Gnosis GR203
TYRES: (F) 235/35R19 Nitto Invo, (R) 275/35R19 Nitto Invo



PERFORMANCE

POWER: 295kW

BOOST: 16.7psi

FUEL TYPE: 98 octane, Motul 800 premix

TUNER: Chris Wall at Prestige Tuning and Motorsport



That stance forces you to set the car at a chassis-destroying ride height and any wheel that suitably fills out the arches is solely a special-order job, seeing double-digit widths and offsets so negative that the grumpy old bastard next door would be proud. Claire and Jaysen may have managed to find the right ride-height balance between not seeing the chassis rails ground into oblivion and still having it look as any Rocket Bunny-equipped car should, but the wheels are straight out of the Kei Miura tuning manual.

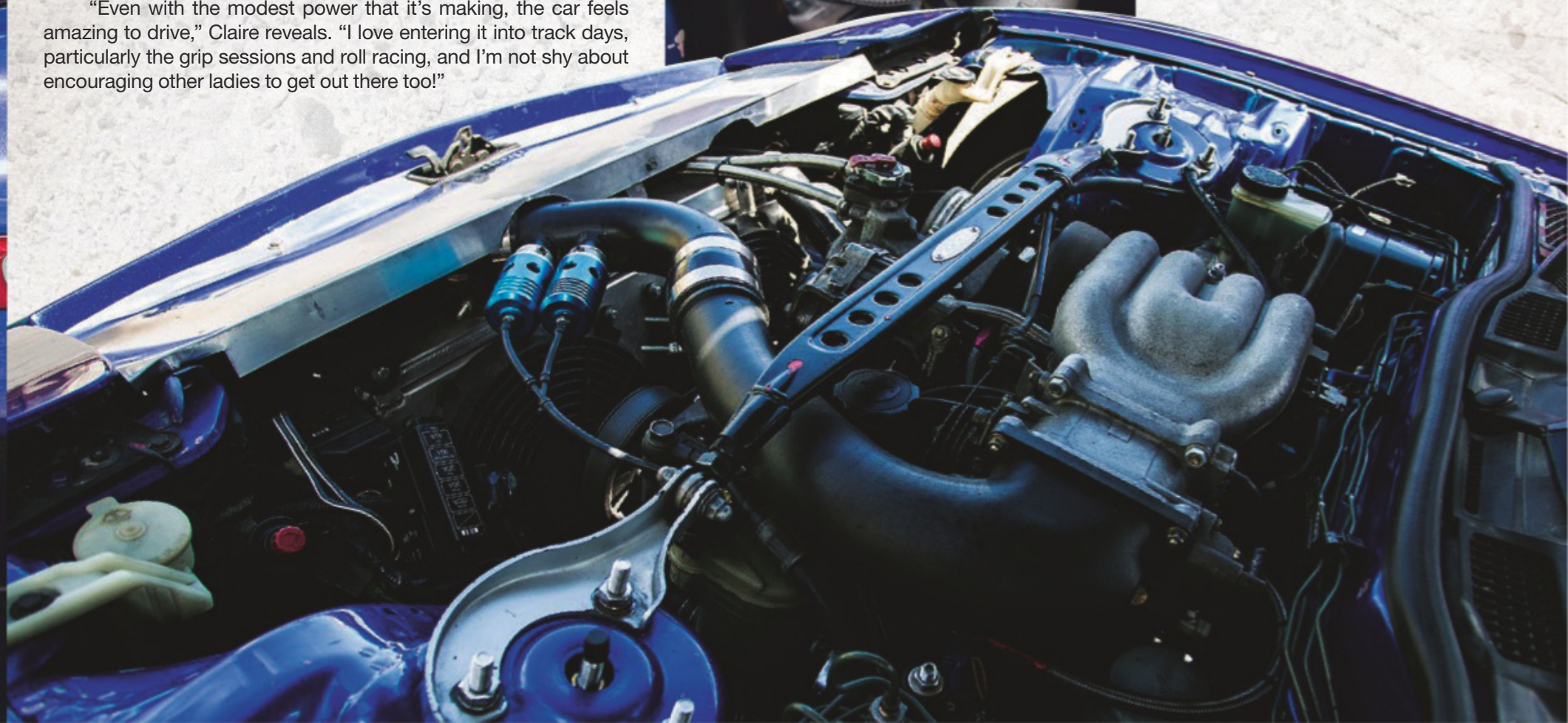
Measuring in at 19x10 inches (-35) on the pointy end and an even gnarlier 19x11 inches (-47) down back, the Work Gnosis GR203s are a welcome change from the regular selection of rollers found on FDs and offer inch-perfect fitment courtesy of the meaty Nitto rubber that they're shod in.

The kit itself may be a replica unit, but, with a bit of fibreglass reworking mastery from Zac Haar at Carboglass to fit it up and the steady hands of Cany Customs' own Blake Harpur to glue it on, the result makes for a super-clean finish — further complemented by the fresh lick of custom Ford Ranger paint sprayed from Blake's gun.

"Even with the modest power that it's making, the car feels amazing to drive," Claire reveals. "I love entering it into track days, particularly the grip sessions and roll racing, and I'm not shy about encouraging other ladies to get out there too!"



THE HEART IS A SUPER SIMPLE AND RELIABLE PACKAGE THAT SEES THE STU LAWTON-BUILT, JC COSMO-SOURCED 13B-RE STRIPPED OF ITS TWINS TO RUN A GARRETT GT3582R THAT SITS ATOP A SINCO MANIFOLD WITH TIAL 60MM — PRODUCING A RESPECTABLE 300KW AT THE REARS



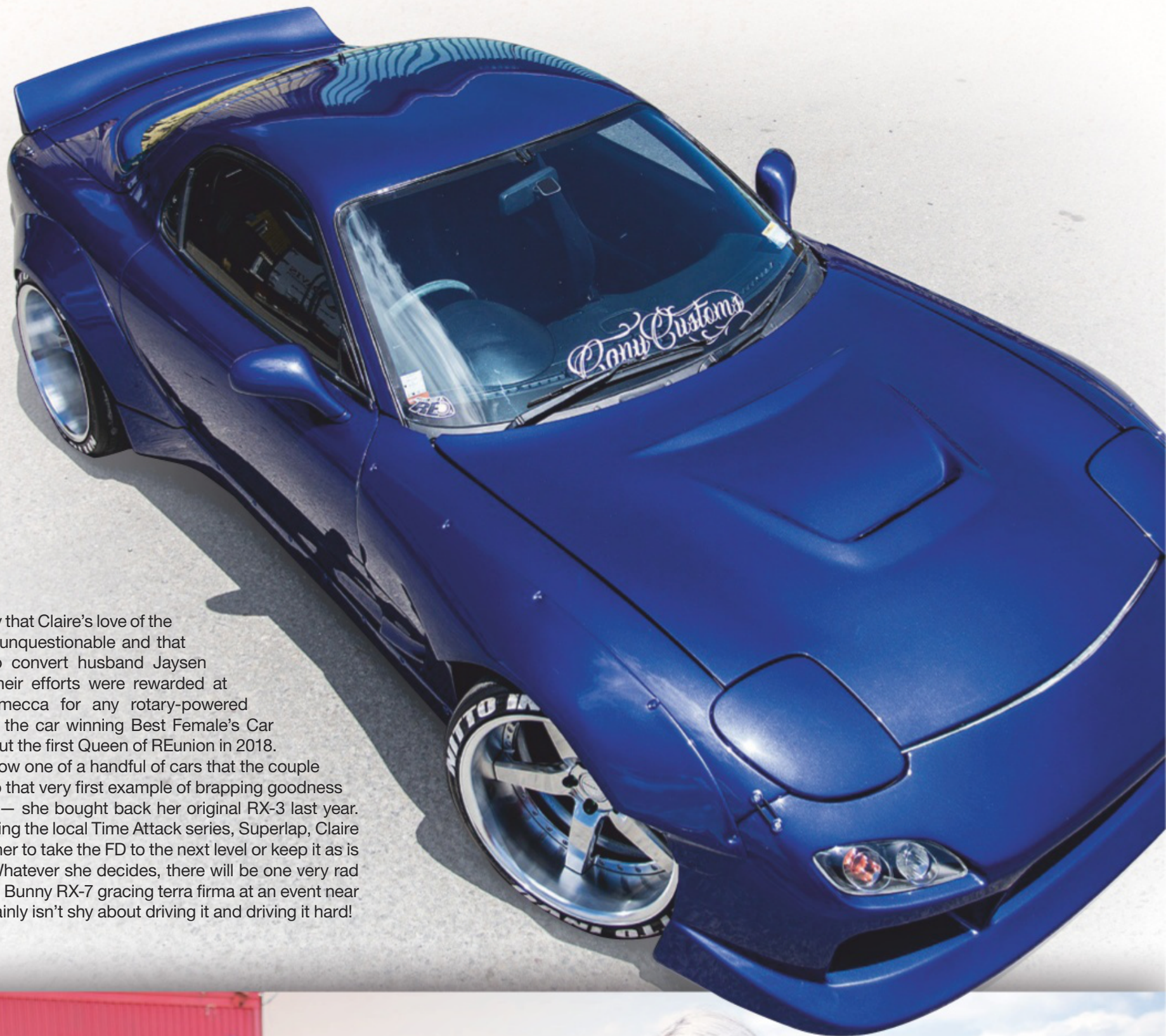
EXTERIOR

PAINT: Resprayed 2014 Ford Ranger blue by Blake Harpur at Cany Customs

ENHANCEMENTS: Rocket Bunny-style kit modified by Zac Haar at Carboglass, fitted by Blake Harpur at Cany Customs

It's safe to say that Claire's love of the spinning Dorito is unquestionable and that she's managed to convert husband Jaysen in the process. Their efforts were rewarded at REunion — the mecca for any rotary-powered enthusiast — with the car winning Best Female's Car and Claire taking out the first Queen of REunion in 2018.

The RX-7 is now one of a handful of cars that the couple own. It lives next to that very first example of brapping goodness that Claire owned — she bought back her original RX-3 last year. With ideas of entering the local Time Attack series, Superlap, Claire is tossing up whether to take the FD to the next level or keep it as is and get another. Whatever she decides, there will be one very rad lady-driven Rocket Bunny RX-7 gracing terra firma at an event near you, as Claire certainly isn't shy about driving it and driving it hard!



DRIVER PROFILE

DRIVER/OWNER: Claire Eveleigh

AGE: Older than the car

LOCATION: Wellington

BUILD TIME: Three years

LENGTH OF OWNERSHIP: Five years

THANKS: Jaysen, for all the time spent working on the car and then never being allowed to drive it; Andrew 'DDI' Pulford, for also putting an insane amount of hours into the build; Mum and Dad Olsen and Mum and Dad Eveleigh for babysitting so I can get out and enjoy the car at track days; Eveleigh Motorsport; Auto Despatch; Zac Haar at Carboglass; Chris Wall at Prestige Tuning and Motorsport; Blake Harpur at Cany Customs, PAC Performance; R's Garage; and Azhar Bhamji at 4&Rotary Promotions



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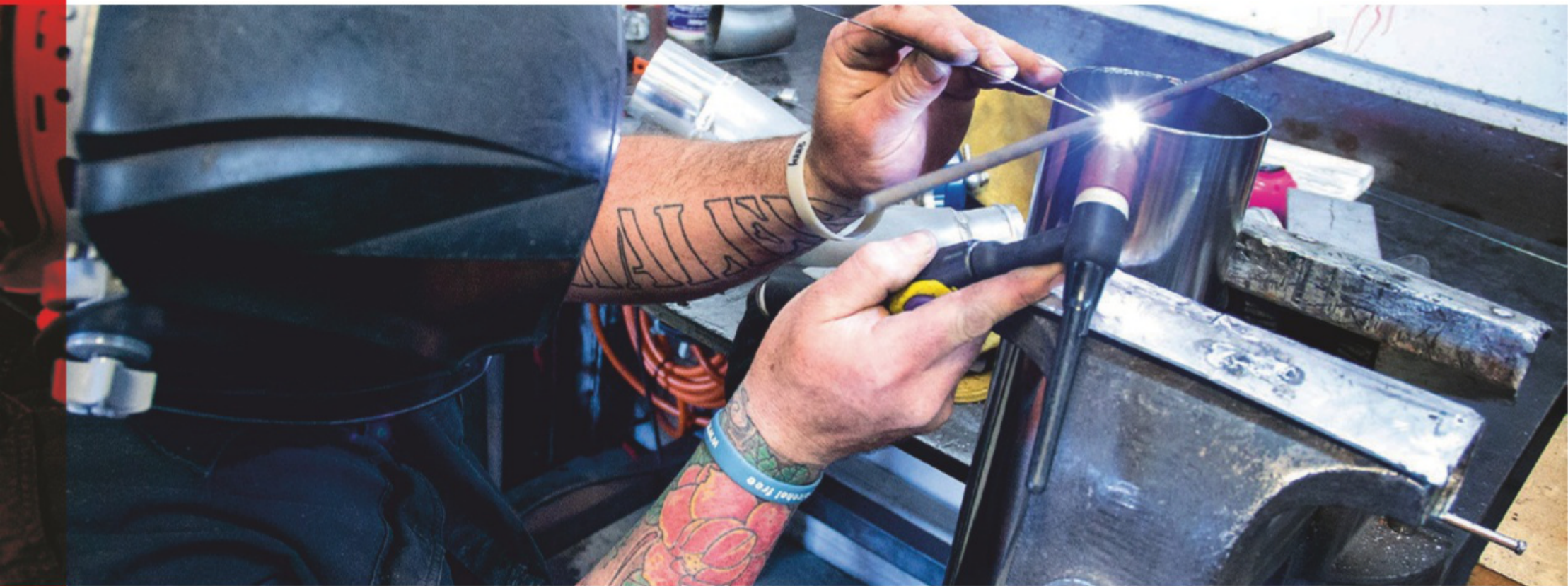
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When you hang around a workshop or two like we do, then you're always picking up ways that guys work. Little tips that save you time and money and, quite frankly leave you wondering why the hell you've been doing it the way you have been all your life! So we thought it would be handy to share our favourites with you in the hope you'll up your hack game. Some you may know, others you may not, and, if you don't, we hope they are game changers for your own weekend hacking. If you have any workshop hacks worth sharing let us know.



TRIM SILICONE HOSE SQUARE

Cutting silicone hose is one of those pesky jobs that seems simple at first, but cutting that sucker straight is another story, as the hose squashes and distorts as you apply pressure. The bigger the hose, the worse it gets. Well, here is one of those tips that you'll wonder why the hell you never thought of yourself. It's near impossible to achieve a factory edge, but this gets you pretty damn close. Take a piece of tube the same size, if not the actual piece you're going to fit the joiner to, mark down how long you want your joiner to become, and then slip it inside the silicone to be cut up to your mark. Take a new razor blade and find the edge of your pipe sitting inside your joiner. Stab it through so the blade sits against the pipe end and use it as your guide.

STICKY NUTS (AND BOLTS)

This is one we figured out after a long one-hour session trying to fit a bucket seat. It's super simple yet genius — if we do say so — when you have a bolt that's in a hard to reach spot (like the underneath of a seat). It works with both conventional and Allen-head bolts or nuts. Basically, what you're doing is taking up the slack that exists between the bolt head and the socket or Allen key so that it stays straight as you manoeuvre it into place blind. It's especially helpful if your Allen keys have rounded edges. We've found masking tape to be the most effective although insulation tape also works. Simply wrap a piece around the head of the bolt and jam it into the socket, or, if you're doing it with an Allen key, wrap the Allen key before placing in the bolt. Yeah, simple but effective.

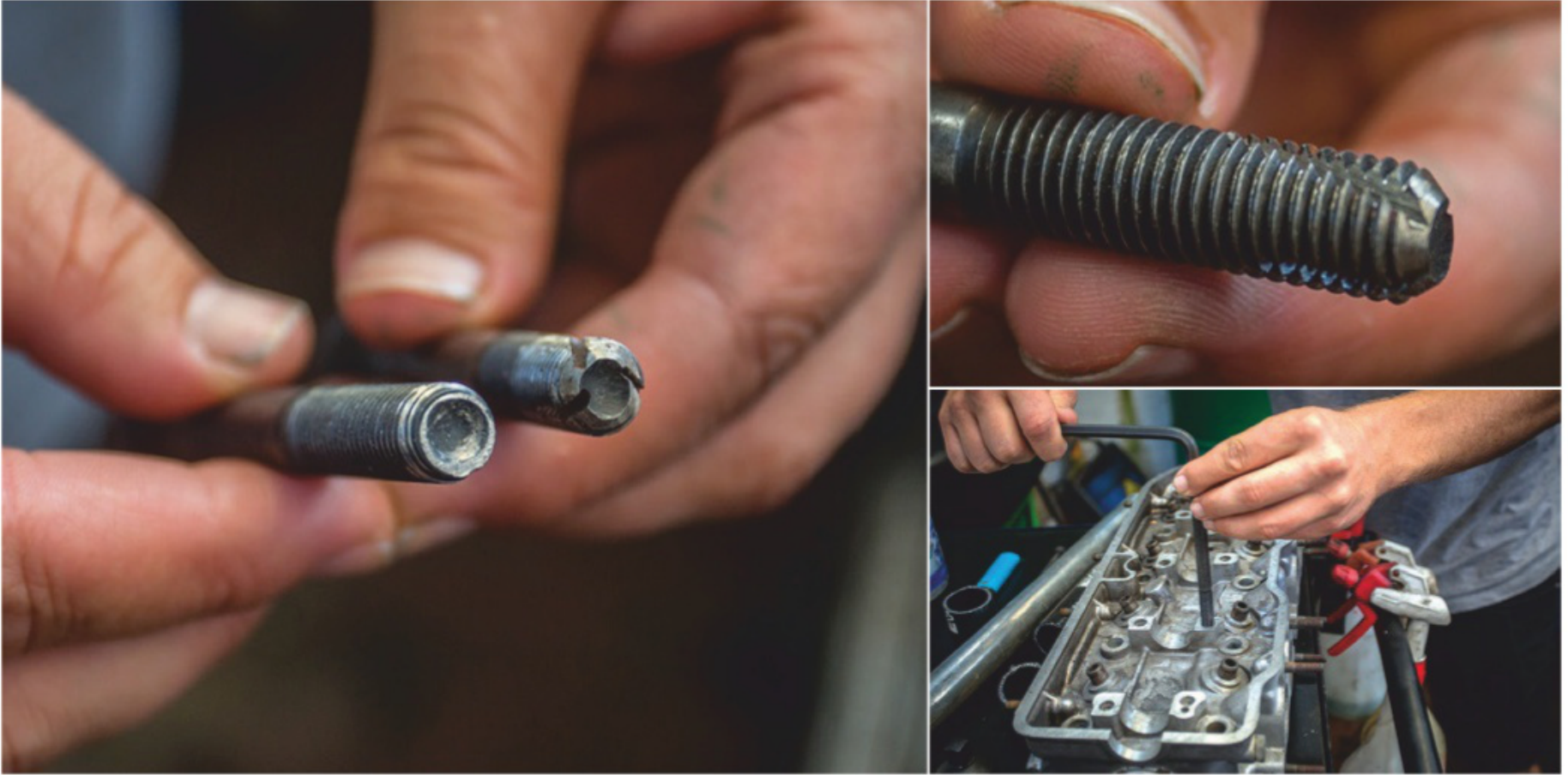


DIY THREAD CHASER

Take an allen head bolt with the same thread size and pitch as the damaged thread. Take your grinder and sharpen the tip a little, then with a 1mm cut-off wheel and cut three 1mm deep slits on the end of your bolt. Angle these so the cut points inward as does the thread. These slits create your cutting edges.

Your tap is now ready to use, just ensure you take it slow and use plenty of lube (at the very least CRC will suffice if you don't carry lube to the track).

Obviously, the bolt hardness is going to be the limiting factor, so it'll work in alloy but forget about stainless.



PERFECT PIE CUTS

We picked up this tip from Kyrie at Quest Fabrication. When cutting your stainless pies to make that sweet lobster-backed downpipe, this little trick will save you all sorts of pain trying to replicate perfect pies each time. Simply tack weld on a small rod or piece of flat bar to the end of your stainless pipe that you won't be cutting off. Ensure that the bar is in the middle of the pipe. Grab a small level, sit it on your new shelf, and ensure that sucker is sitting level. Make your first cut, and, like always, use lube on the blade. Flip the pipe horizontally, reset your level, then cut again. For an added bonus, set up a stop on the other end so that you don't have to measure the length each time.





TSUKUBA ATTACK 2019
WORDS AND PHOTOS: RENE VERMEER

AERO CONSLAUGHT



Tsukuba Circuit, Japan is the home and the heart of Time Attack racing the world over, and a place that I, like undoubtedly many of you, have wanted to visit for a lifetime. If virtual laps around the famed circuit counted for anything, I would be at a veteran level, having smashed out thousands upon thousands around the 2.04km long circuit on various gaming platforms such as *Gran Turismo* and *Forza Motorsport*. Enough was enough. After over a decade of watching other Time Attack and motorsport enthusiasts enjoy the circuit, I had to go there myself.

Flights were booked, and I got in contact with a local GT-R tuning shop legend by the name of Mitsuhara Motojima, an ex-Jun Auto head mechanic from the late 1990s and early 2000s, an ATTKD mechanic after that, who currently operates Admix Racing Service, located 90 minutes from Tsukuba in Saitama. Fortunately, the Japanese are incredibly hospitable and offers were made for us to ride with the team to Tsukuba Circuit on 22–23 February for Attack, Japan's leading Time Attack series.

WITH A FAIRLY CLOSE PROXIMITY TO TOKYO, TSUKUBA CIRCUIT IS BASED IN THE SMALL RUNDOWN FARMING TOWN OF SHIMOTSUMA AND WAS ORIGINALLY BUILT IN 1966 WITH THE AIM OF ENTICING THE YOUTH INTO MOTORSPORT



At 4am on 22 February, alarms were ringing. Mitsuhara was keenly waiting outside, Nissan Cube at the ready. After swiftly making our way to Admix to collect a couple of 520-plus-kilowatt (700hp) T-88-equipped R32 GT-Rs, we were bound for the Tsukuba test day. After years of pining, was this really happening or was I still dreaming? Then, it hit me harder than an replica turbo on an RB20DE — we were driving through the holy gates of Tsukuba Circuit with a squad of high-powered GT-Rs in tow.

Game time. Cameras out, snatch and grab — it was time to check out the action, but, most important, soak in our surroundings. Several thousand notches above New Zealand's local Time Attack scene, these were Japan's elite in attendance. NSXs, GT-Rs, Civics, WRXs, Evos — you name it, and they were there in droves, all ready for serious battle, clad in Samurai-like armour. Besides the two overseas entrants — Canada's William Ae-Yeung of PZ Tuning in his wild EFR9280-boosted Honda Civic and Australia's Adam Casmiri piloting the JDMYard Honda Civic — it was predominantly a Japanese-only event. However, with some serious goals set by the aforementioned overseas applicants, there were some serious feathers to be ruffled.

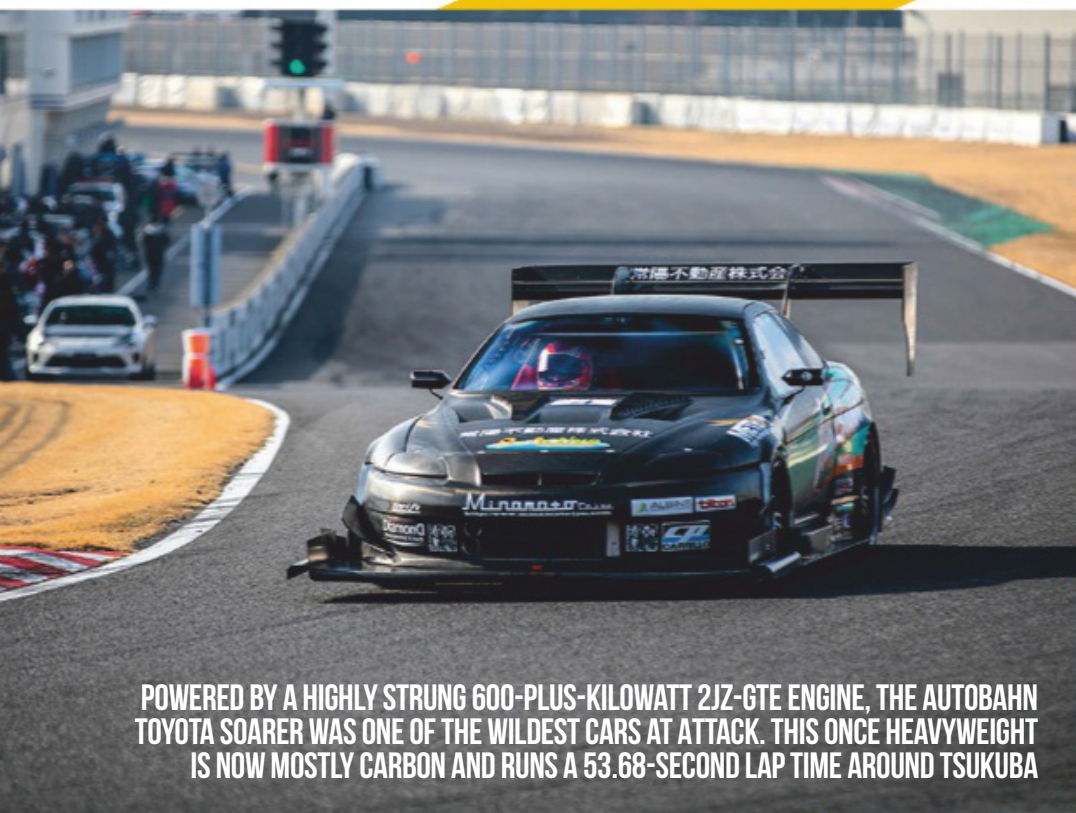
For most of last year and all of this year, mega-tuning house HKS has been pushing the boundaries of the front-engined front-wheel-drive (FF) platform by means of the latest Suzuki Swift named 'TRB-04'. Powered by a Mitsubishi 4G63 engine and driven



by Japanese tuning driver legend Nobuteru Taniguchi, the dynamic duo smashed out a 55.498-second lap time. No easy feat, but palms were getting sweaty and there was plenty of Mum's spaghetti — er, ramen — in the Taniguchi household as the two overseas FF competitors announced their onslaught on Japanese soil. Taniguchi knew they'd be fast, but he had no idea just how fast.

"How fast have you gone this morning?" I asked Adam Casmiri after the very first session on test day. "Low 55s, mate," he casually replied. "We've already beaten HKS on our fourth ever lap on the circuit. We're a little faster than PZ Tuning, but I am sure that will change soon."

And change it did. After the second session, William had smashed both records, blowing half the pro field out of the water. After a quick observation compared with local competitors, it appeared that William had a serious technical edge. Sophisticated traction control, a paddle-shifted sequential gearbox, and an efficient turbine from his sponsor BorgWarner. These things, unfortunately, aren't commonplace in Japan, as tuners still remain



POWERED BY A HIGHLY STRUNG 600-PLUS-KILOWATT 2JZ-GTE ENGINE, THE AUTOBAHN TOYOTA SOARER WAS ONE OF THE WILDEST CARS AT ATTACK. THIS ONCE HEAVYWEIGHT IS NOW MOSTLY CARBON AND RUNS A 53.68-SECOND LAP TIME AROUND TSUKUBA



ASLAN IS KNOWN FOR BUILDING THE FASTEST NATURALLY ASPIRATED (NA) HONDAS TO GO AROUND TSUKUBA. WITH A SERIOUS K-SERIES ADDICTION, TEAM DRIVERS ARE COMMITTED TO STAYING NA, WITH BEAUTIFUL FABRICATION HIDING UNDER THEIR CARS' BONNETS. IF YOU'VE SEEN THE FAMOUS KANJO LOOP RACER VIDEOS, THEN YES, YOU'LL HAVE SEEN THESE OG OSAKA HONDA DRIVERS PEDAL BEFORE



TAKANORI SEYAMA IS THE OWNER OF THE MOST SINISTER-LOOKING CAR IN JAPAN. PACKING A FIRE-BREATHING RB26 ENGINE, THE 'SEYAMAX' R32 GT-R WAS BUILT WITH THE HELP OF ADMIX RACING SERVICE AND, INTERESTINGLY, IS NOW REAR-WHEEL DRIVE. IT'S CURRENTLY THE FASTEST GT-R AROUND TSUKUBA, RUNNING A 55.016-SECOND LAP TIME THIS TIME AROUND. NO DOUBT TIMES WILL CONTINUE TO DROP AS TAKANORI GETS USED TO THE LATEST VOLTEX AERO UPDATES



somewhat old school, using laggy turbos, old ECUs, and their right foot for traction adjustment. Will finished the weekend with a stonking 53.071-second lap time around Tsukuba, putting him in the top-10 fastest tin-tops around the circuit ever. Still some three seconds off Under Suzuki's time, but an incredible feat after having only driven the circuit for two days.

Come race day at Attack, cars in attendance quadrupled as contestants made their way to Tsukuba from all over Japan. Tired drivers in tow trucks, with their teams and families in attendance, unloaded their aero-clad creations and prepped for race day. Soon after, cars made their way out onto the circuit with freshly installed and shaved tyres.

With no time to muck around, each class is given a 20-minute window to lay down a competitive time. With the soft Advan A050 compounds that most cars have fitted, usually no more than five laps are completed, as tyres' efficiency levels fall. This makes for seriously exciting viewing.

After two days of high-adrenalin madness and around 10 Boss coffees, numerous Japanese candy bars, and 3000 photos later,





T-88 TURBOS EVERYWHERE! EVERY GT-R ADMIX RACING SERVICE HAD IN ATTENDANCE FEATURED THE OLD-SCHOOL GREDDY TURBINE. WHY? IT'S AS SIMPLE AS THE TURBO BEING A SYMBOL OF POWER IN JAPAN. PLUS, THEY'RE A COOL HIGH-SPEED TURBO, AS MITSUHARA TOLD US. SOMEONE GIVE THIS MAN A MODERN G-SERIES OR BORGWARNER TO PLAY WITH!

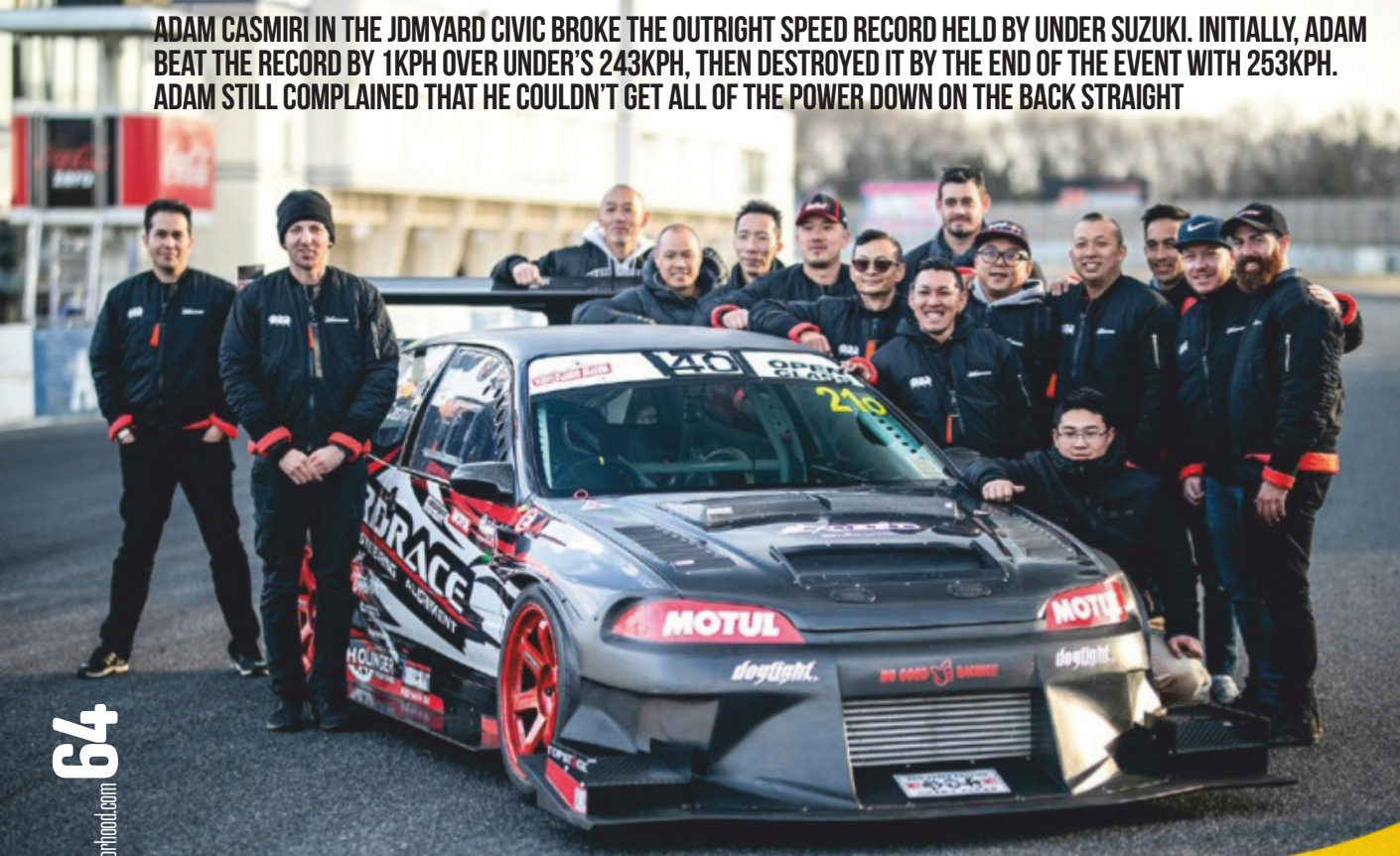
Attack Tsukuba was coming to an end. It was described as the biggest Attack event organizers have ever held, and it was incredible being a part of history — never before had a team of Canadians or Australians travelled so far and taken down such a large tuning house in Japan. After talking to a few locals, it's clear that the Time Attack scene in Japan has definitely taken a blow — but for the better. William and Adam were forthcoming with info on their set-ups and willing to talk with anyone about their successful cars. I think the Japanese saw the light with a lot of their outdated tech. Come this time next year, I reckon that we'll see times drop as Japanese teams switch to technology from this side of the 2000s — well, we can only hope.

Incredibly, the fastest time at the event was laid down by an amateur owner-driver by the name of 'Fire Ando' in a Mitsubishi Evo, featuring the wildest aero you've ever seen and a billet 4G63 engine. His best time: 51.119 seconds.

"Sugoi!" Mitsuhashi said to me, spotting me at the end of the day. "What do you think of Japanese Time Attack?" Lost for words, my expression said it all — a life-changing experience. I'll be back, Japan, you've got me hooked!



ADAM CASMIRI IN THE JDMYARD CIVIC BROKE THE OUTRIGHT SPEED RECORD HELD BY UNDER SUZUKI. INITIALLY, ADAM BEAT THE RECORD BY 1KPH OVER UNDER'S 243KPH, THEN DESTROYED IT BY THE END OF THE EVENT WITH 253KPH. ADAM STILL COMPLAINED THAT HE COULDN'T GET ALL OF THE POWER DOWN ON THE BACK STRAIGHT



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NO JZ

THE ENGINE BEHIND THE RADIAL-TYRE WORLD RECORD



In a sea of 2JZs, Nikki Hepburn is bucking the trend while also smashing records with her Pro Turbo 1FZ-FE-powered Toyota 86. The car was the first radial-tyre car to run a six, and currently holds the record for both fastest and quickest radial tyre in the world — a record they keep chipping away at. The current PB, which was set in Orlando, is 6.55s at 217mph (349kph), which puts the team almost half a second ahead of its competition.

While the 1FZ-FE — an engine that's usually found in Land Cruisers — might sound like a strange choice, it is, in fact, rather popular, with the likes of Ben Bray running one in his Solara to a PB of 6.58s; Titan Motorsports has also used one. Aftermarket parts are easy to come by, and, generally, they are destroyed to allow the engine to rev — hell, you can even get billet blocks for them.

In Nikki's car, the factory 4.5-litre cast-iron block remains, although it's been destroyed to 3.9 litres with a Spool billet crank, and custom alloy rods and pistons. JW Automotive has built the engine and modified the factory head extensively, using Supertech components. The turbo is a Gen II Garrett GTX5533R (98mm) with a 6Boost manifold featuring billet merge and billet flange. Plazmaman recently came on board, and the car now runs one of its billet manifolds, billet throttle body, and billet radiator. The billet continues with a billet rocker cover, and a one-piece dry-sump pan-timing cover-engine mounts — yes, one piece! Interestingly, the car runs dual Link Xtreme ECUs so as to run four 2400cc injectors per cylinder for a total of 24. This is backed by a Reid two-speed Powerglide, and the current dyno output is 1494.1kW.

While this is an extreme version of the 1FZ, the engines are known to take upwards of 597kW on a stock bottom end with unported head. Given that they have more capacity than their 2JZ brothers, that means more torque and lots of it. Pair this block with a small(ish) turbo, and you'd have a very responsive engine combination on your hands, with more aftermarket support than you'd suspect. We found a few for sale at around the \$3K mark, so why the hell is no one using these things here?





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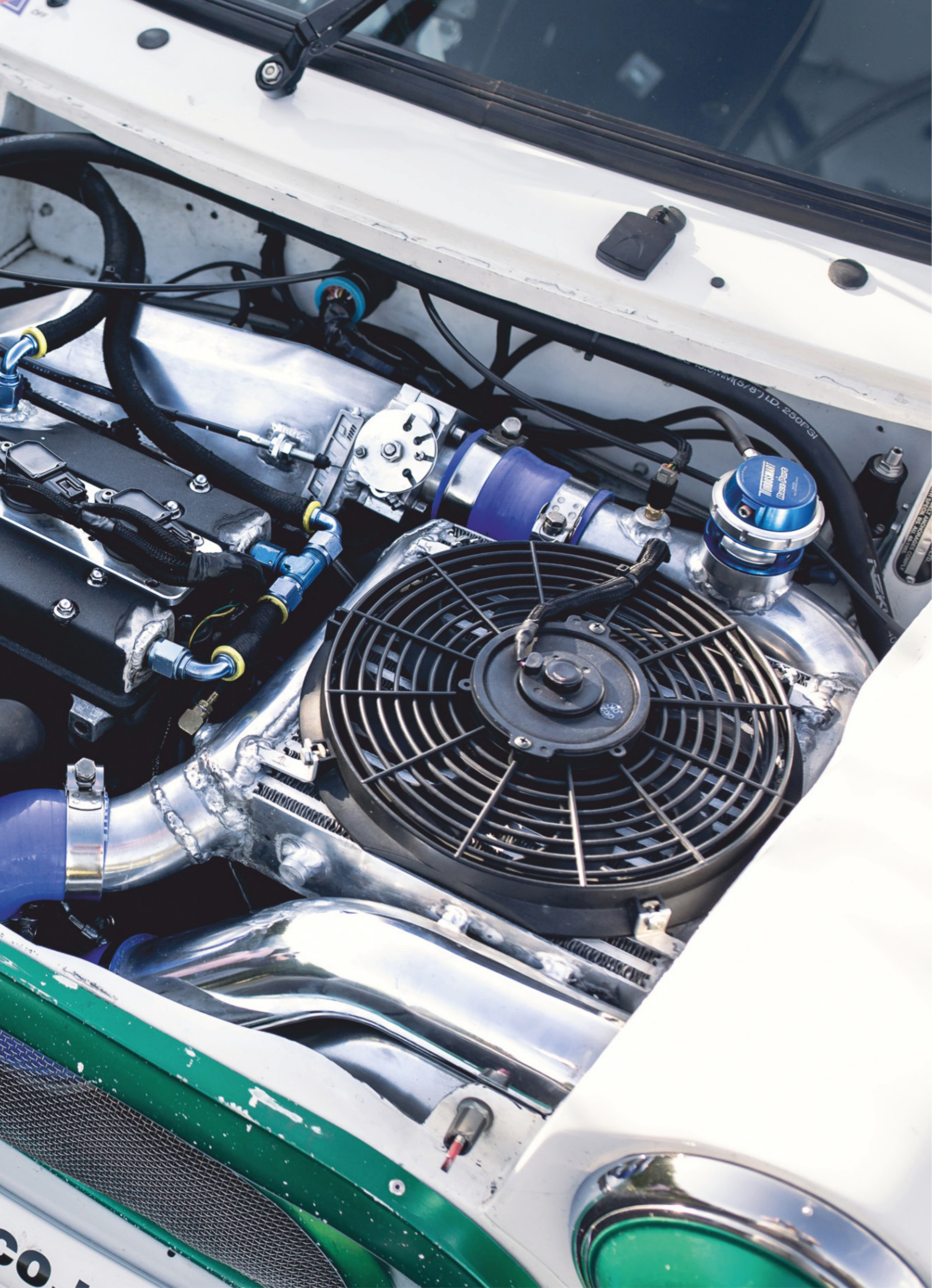
PINT-SIZED

ASTA

MINIS HAVE ALWAYS PUNCHED WELL ABOVE THEIR WEIGHT, BUT JUST HOW MUCH CAN A MINI SLAY WITH 261 BOOSTED KILOWATTS ON TAP?

WORDS AND PHOTOS: RICHARD OPIE







Sixty years ago, the OG Mini hit the road with a blazing 30-something stampeding British horsepower (22kW) pulsing through the front wheels. Owing to its lively chassis, people with a bit of an inkling for things with performance potential soon latched onto the idea that these wee things could go all right — with a bit of a tickle, naturally. Hell, even BMC itself started souping them up, with the help of Grand Prix engineer John Cooper, and started taking out international rallies.

There's always been a common denominator among folks running a quick Mini — they are all freaking nuts. The theory goes that the more speed you can wring out of one of these old British icons, the slightly more certifiable your state of mind. It doesn't matter whether the Mini's still running an old pushrod lump or something a little more up to date, there's just something inimitable, and slightly unsettling, about seeing a classic Mini pushed well

beyond the limits that any engineer would have dreamed possible 60 years ago.

One of these nutcases — meant with the most awe-stricken sincerity — is Hayden Gare, diesel mechanic and creator of what's quite likely the fastest circuit-spec Mini in the country. You wouldn't think it, because of Hayden's measured, softly spoken demeanour and his equally calculated methodology when it comes to piecing together his mental 1976-example classic Mini, but his attitude is that of the perennial Kiwi garage-tinkerer — a tinkerer who's managed to push his Frankenmini to 1min 11s laps at Hampton Downs, rapid enough for the GTRNZ GT2 grid.

However, we're getting ahead of ourselves here. Hayden, with a history of mucking about with dirt bikes, actually came to own the Mini as a prospect for his first road car.

"We pulled this thing out of a barn in Putaruru, got it all stripped down, and realized it had a few too many holes to restore.

SHOES

WHEELS:
Gare Motorsport
13x8-inch

TYRES: Avon 8.2/20-13
(wets and slicks)



CUSTOM 13X8-INCH WHEELS DESIGNED BY HAYDEN USE A WATERJET-CUT CENTRE SANDWICHED BETWEEN SPEEDWAY MIDGET BARRELS SHOD IN STICKY AVONS. HIDING BEHIND THEM ARE SIX-POT FRONT CALIPERS AND HONDA CBR MOTORCYCLE BRAKES AT THE REAR

HEART

ENGINE: Toyota 4A-GE (16-valve), 1600cc, four-cylinder

BLOCK: 4A-GE seven-rib block, CP pistons (13:1), 4A-GZE rods, Manon Racing Products (MRP) block girdle, MRP baffled sump, MRP harmonic damper crank pulley and trigger wheel

HEAD: Gare Motorsport-ported 4A-GE 16-valve big-port head, under-shim buckets, Kelford turbo cams, Ferrea oversize valves

INTAKE: Custom MRP intake manifold, MRP throttle body, Gare Motorsport intercooler

EXHAUST: 2.5-inch custom exhaust, carbon-fibre Ducati mufflers

TURBO: Garrett GT2860rs, Gare Motorsport manifold

BOV: Turbosmart Race Gate

FUEL: Bosch 044 pump, Faucet lift pump, 875cc injectors

IGNITION: 1NZ-FE coils, Brisk spark plugs

ECU: Link G4+ Storm, MoTeC C125 dash data logger, Link lambda sensor kit

COOLING: Modified RX-7 radiator (rear mounted), mechanical water pump, electric water pump

WITH BIG FIBREGLASS FLARES FRAMING EACH ARCH, A HEFTY FRONT SPLITTER, AND A MAMMOTH WING, THE MINI IS ALMOST A CARICATURE OF A CAR. ON THE TRACK, THOUGH, ITS PERFORMANCE IS ANYTHING BUT A JOKE, LAYING WASTE, AS IT DOES, TO CARS WITH CONSIDERABLY MORE POWER





We parked it under a tree, found another one with a decent shell, and built that into a road car,” he recalls.

Hayden’s still got that road-going Mini, restored with a hot BMC A-Series engine, 13-inch wheels, big brakes, and all the fruit, pieced together by himself and his old man, himself a mechanic of many years and punter of super karts.

Racing, or building a circuit weapon, hadn’t even crossed Hayden’s mind at this point. Then that rusty shell came calling from under its cover, a response to a project assignment while Hayden was completing the motorsport course at Wintec.

“Halfway through the year, we got told we could do a 16-week project, so Dad and I sorta thought, hey, we should build a club car.” Cue: one shell not good enough to be a road car but perfect for a race car being pulled out from under the tree.

The epicentre of the project became the roll cage, with a

IT’S AN EXERCISE IN KEEPING THE MINI LOOKING LIKE A MINI, FROM THE OUTSIDE AT LEAST. WITH THE FRONT CLIP OFF, IT SHOWS JUST HOW TIGHT THE BOOSTED 16-VALVE 4A-GE FITS INSIDE THE NARROW MINI SHELL. THE GT2860RS HANGS OFF A CUSTOM MANIFOLD, WITH SHORT PIPING RUNNING INTO THE INTERCOOLER SITTING ATOP THE GEARBOX



PERFORMANCE

POWER: 261kW at 9500rpm

BOOST: 13psi

FUEL: E85

TUNER: Mike and Sue at Reaction Racing

WEIGHT: 670kg



INTERIOR

SEATS: OMP, Willans six-point harness

STEERING WHEEL: OMP

INSTRUMENTATION: MoTeC dash

EXTRA: RPM window net



DRIVELINE

GEARBOX: Toyota C60, six-speed, Kaaz close-ratio gear set

CLUTCH: MRP Tilton twin-plate

FLYWHEEL: MRP

DIFF: Kaaz limited-slip,

EXTRA: Toyota Levin CVs, Daihatsu Sirion electric power steering

SUPPORT

STRUTS: CSI coilovers

BRAKES: (F) Six-pot Wilwood calipers, 264mm ARP race rotors, Endless pads; (R) CBR1000RR four-pot calipers, CBR600 rotors

EXTRA: Sprint car torsion bars as sway bars, custom front alloy rose-jointed top arms, CNC alloy rear trailing arms

helpful bonus of discovering moulds for the fibreglass front clip, boot lid, and bumpers all stashed at Wintec — we can assume that Hayden passed the project with flying colours. With the ‘body in white’ stationed at home in the shed, the task of getting the Mini on its wheels and shifting under its own steam beckoned.

Something that went a bit quicker than souping up a power plant born in the 1940s was on the agenda. Sure, VTEC conversions were available — and essentially a bolt-in solution — but instead Hayden placed a blue-top 4A-GE in that cramped engine bay.

“I bought this whole FX-GT for \$400 from up north,” he explains. “Some guy wrote it off paddock hacking it, but the engine and driveline were fine.”

Comparing the Honda option, Hayden reckons that the 4A-GE is a bit more compact, especially in the gearbox area. And it’s well known that Honda swaps require lengthening the nose of the car, something that he wasn’t prepared to do to compromise the classic proportions.

“We just thought we’d see if it worked, and it turned out it did!” he says.

Soon the car was running (and winning) in the Super Mini Challenge, but this ‘mild spec’ soon gave way to a serious naturally aspirated (NA) build, developed with a high-compression, seven-rib bottom end based on a brand-new Toyota crank. Team Gare added 4A-GZE rods, 82mm CP pistons, and a ported head sporting big Ferrea valves and a set of angry Kelford cams. Breathing through a set of responsive FCR carbs, it never saw dyno time, yet proved

STRICTLY BUSINESS ON THE INSIDE. HAYDEN SITS IN A CELL OF SORTS, HARNESSED INTO AN OMP FIA-SPEC SEAT, WITH THE MOTEC DATA-LOGGING DASH IN FULL VIEW, VITALS ON DISPLAY. IT’S RACE CAR CHIC, WITH EVERYTHING THAT HE NEEDS TO GO FAST AND ABSOLUTELY NOTHING HE DOESN’T

PINT-
ASST-
A

EXTERIOR

PAINT: White

ENHANCEMENTS: ABS Motorsport front splitter, ABS Motorsport flares, alloy side skirts, fibreglass bonnet, fibreglass front, fibreglass boot, fibreglass bumpers



DRIVER PROFILE

DRIVER/OWNER: Hayden Gare

AGE: 26

LOCATION: Hamilton

OCCUPATION: Mechanic

BUILD TIME: Ongoing

LENGTH OF OWNERSHIP: 11 years

THANKS: Jerome, Sheree, Esther, Trevor, Bruce, Wayne at Waikato Engine Reconditioners, Mike and Sue at Reaction Racing, everyone else who helps out

potent enough to step into the GT3 class. Still not content with its pace, and with GT2 in the team's sights, boost was soon on the cards.

"The only thing we changed on the engine to go turbo was a set of more suitable cams and a slightly thicker head gasket," Hayden explains, before adding, "It's still 13:1 compression." Hanging the Garrett GT2860RS off a homebuilt manifold meant that the radiator is now lurking in the boot, while a custom intercooler sits in the space vacated by the radiator. Although it looks tightly packed, Hayden explains that inlet temps remain sensible, and the added bonus is no serious modification to the silhouette of the car.

Initially, the car was suspended on original rubber cones — non-Mini folk might want to Google that — but it now features custom Competition Suspension Inc. (CSI) coilovers on all four corners. There's more Gare-fabricated parts beneath too, with custom rose-jointed top arms and CNC'd alloy rear trailing arms. Even sprint car parts join the fray, with torsion bars repurposed as front and rear sway bars for the Mini's 670kg mass. Six-pot Wilwood calipers were "fitted because everyone said it couldn't be done," says Hayden, and lurk beneath custom-fabricated 13x8-inch wheels. Calculated to accept just the "right"-size

Avon slick, the wheel-and-tyre package is designed to take best advantage of the Kaaz close-ratio gear kit. The "box is still a weak link of the car", with selectors causing problems as Hayden smashes the shifter from cog to cog while sitting in the driver's 'cell' inside the car.

Minis might be known for their Tardis-like space inside, but it's at a premium with the cage, OMP seat, Accusump, fuel lines, coolant lines, and whatever else runs through the cabin. Nonetheless, Hayden claims that it's a comfortable place to hang out for a few laps, and the car isn't as violent to drive as the corner speed from a spectator's perspective suggests.

"It just goes in a straight line; I can take my hands off the wheel at 200kph and it feels planted," he says. "We're able to just smash the gas out of corners, and it puts power down well. The data logging shows I'm giving it as much throttle as I can!"

Now a season down in the GT2 grid, Hayden and the Mini are running towards the mid rear of the field but with a focus further forwards. Hayden laughs, alluding to 1min 9s lap times at Hampton Downs.

"Then we'll really be able to mix it up with some of these boys with the big cars!"

See, we told you he is nuts. Stark, raving mad!



GAME OVER



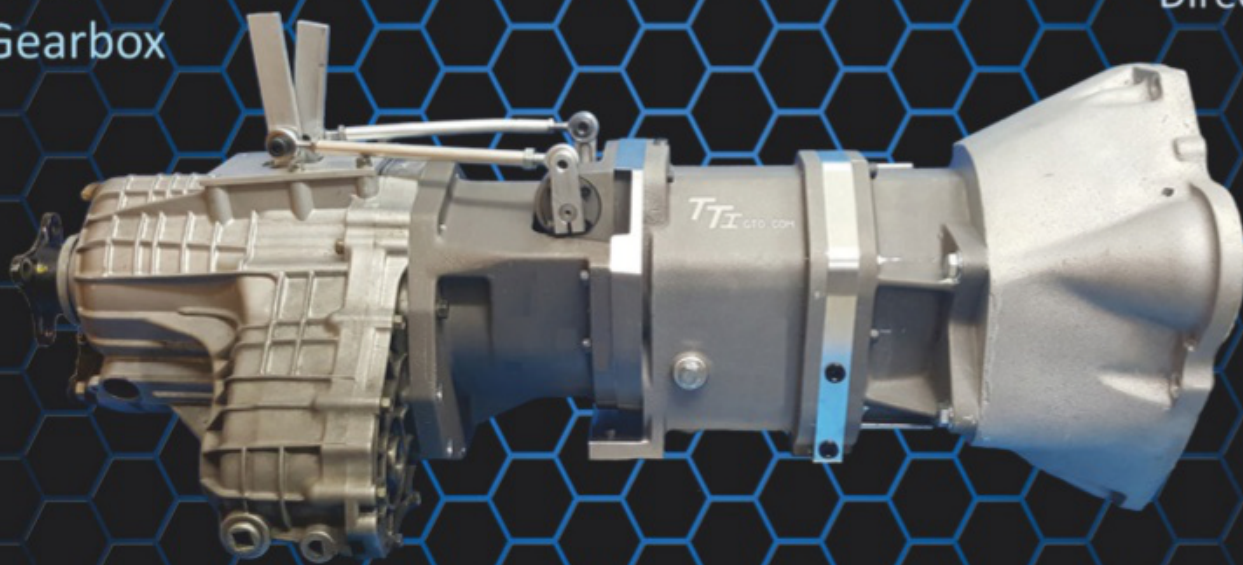
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FIVE UNDER

THE BEST BANG-FOR-BUCK OPTIONS WHEN IT COMES TO BUYING A DAILY-DRIVER

WORDS: JADEN MARTIN PHOTOS: NZPC ARCHIVES

Wind the clock back 10–15 years and you could have easily picked up an R32 GTS-T, Supra JZA80, or Evo I–III with just \$10K in your pocket and daily-driven the hell out of it. Many of you would have, and a select few of you might still be lucky enough to own one of those cars. But, in 2019, those and many more like them are worth wild sums of money. If you find one that could be had for \$10K or under, there's probably a solid reason that it's priced so low. So, what do you do when you're on

the hunt for a new daily-driver but don't want to wait five minutes to hit the posted speed limit when taking off at the lights? It's a big world out there, and, thankfully, we have most of that world available right here in New Zealand when it comes to cars, thanks to our lack of local manufacturing. And if you know the right rocks to look under, you can dig up a few gems that mix the enjoyment of a performance-based car with the comfort and practicality of a good daily. To make that task easier for you, here's our top-five daily-drivers for \$10K or under.



BMW 335i (E9X) – 2007 TO 2013

Seeing as the German automaking powerhouse that is BMW loves to offer every level of trim under the damn sun, instead of focusing on the whole fifth-gen 3 Series range, we'll take a look at the one that actually matters to most of you reading this: the turbocharged 335i. It's probably one of the best, most affordable, and underrated options on this list for the simple fact that most potential buyers are still scared off by the age-old sentiment that European equals frequent failures and costly maintenance. While this may have been true for certain older European-produced cars, most modern examples have had pretty solid runs, and the BMW 335i is no exception. Plus, how can you argue with a straight-six turbo that offers upwards of 200kW and is one of the best paddle-shifted autos ever made?

Offered in four distinct body types, each had its own model designation, with 'E9X' commonly accepted as the term to be used when describing this generation of the 3 Series. These types were as follows: four-door sedan (E90), touring wagon (E91), coupe (E92), and convertible (E93). The E92 335i coupe, introduced in 2006 for the '07MY, was the first 3 Series model to be sold with a turbocharged petrol engine, introducing the world to the N54 three-litre twin-turbo straight-six power plant — which is a predecessor to the examples found in the current-day BMW Z4 and the Toyota Supra (A90). It produces a manufacturer-claimed 225kW at the rears and 400Nm of torque.

Specs between all four models remained similar, with minor

variations in aesthetics and interior trims. However, with the coupe, the tail-light design was different than that found on other body types. Other differences included the more steeply angled headlights, smaller side windows, and longer doors. Instead of the three-person bench, the rear seats only two passengers and includes a centre console tray. There are about a million optional extras that were available at the time of purchase, so you can do your own research on that front.

For the 2009–2013 model years, BMW upgraded to the N55, which remained virtually identical besides the change from a twin-turbo set-up to single. This saw power and torque figures stay the same, but it produced improved mid-range power due to the responsiveness of the new huffer and achieved 400Nm peak torque from just 1200rpm. All model years were backed by the ZF 6HP six-speed Tiptronic (paddle shifted), which can be found equipped on numerous sports cars from the likes of BMW, Audi, Jaguar, Maserati, Aston Martin, Rolls-Royce, Bentley, and even the popular Korean Hyundai Genesis Coupe. There are six-speed manual models out there, but for the purpose of this article, we won't mention what price they'll run you.

In sedan or touring-wagon form, the 335i makes a wicked parts hauler and can be loaded up with a ton of mates for Friday night peels. As an added certification of daily-driven prowess, NZ Performance Car editor Marcus has a touring wagon for just that.

“

IT PRODUCED IMPROVED MID-RANGE POWER DUE TO THE RESPONSIVENESS OF THE NEW HUFFER AND ACHIEVED 400NM PEAK TORQUE FROM JUST 1200RPM.





WITH THE TOP
SPEC OFFERING
A STRAIGHT-SIX
TURBO HEART
AND MANUAL
GEAR-SWAPPER
... THERE'S
PLENTY TO
WANT IN A
VEROSSA.
”

TOYOTA VEROSSA (X110) – 2001 TO 2004

Most will have limited to no knowledge of what the hell a Verossa actually is, mostly due to its rare appearance on New Zealand roads. Hell, until recently we barely knew what they were. But, while they may not be as common as the other options that appear on this list, there is enough of a supply here to make it a viable option for daily duties outside of the regular offerings — with the 20-year import rule coming up in only a few short years, there will be plenty more flooding across the border too. With the top spec offering a straight-six turbo heart and manual gear-swapper that feeds drive to the rear wheels and an interior reminiscent of a Crown, there's plenty to want in a Verossa.

Sold exclusively for the Japanese domestic market at Toyota Netz Stores, the Toyota Verossa is based on the Mark II (X110) chassis, although it does not share the same body styling, instead being marketed as a smaller companion sedan to the Toyota Aristo. It replaced the Mark II stablemates, the Chaser and Cresta, with both ending production in 2000, and combined the performance features of the Chaser with the luxurious comfort of the Cresta, in a car that was dimensionally smaller than the Crown.

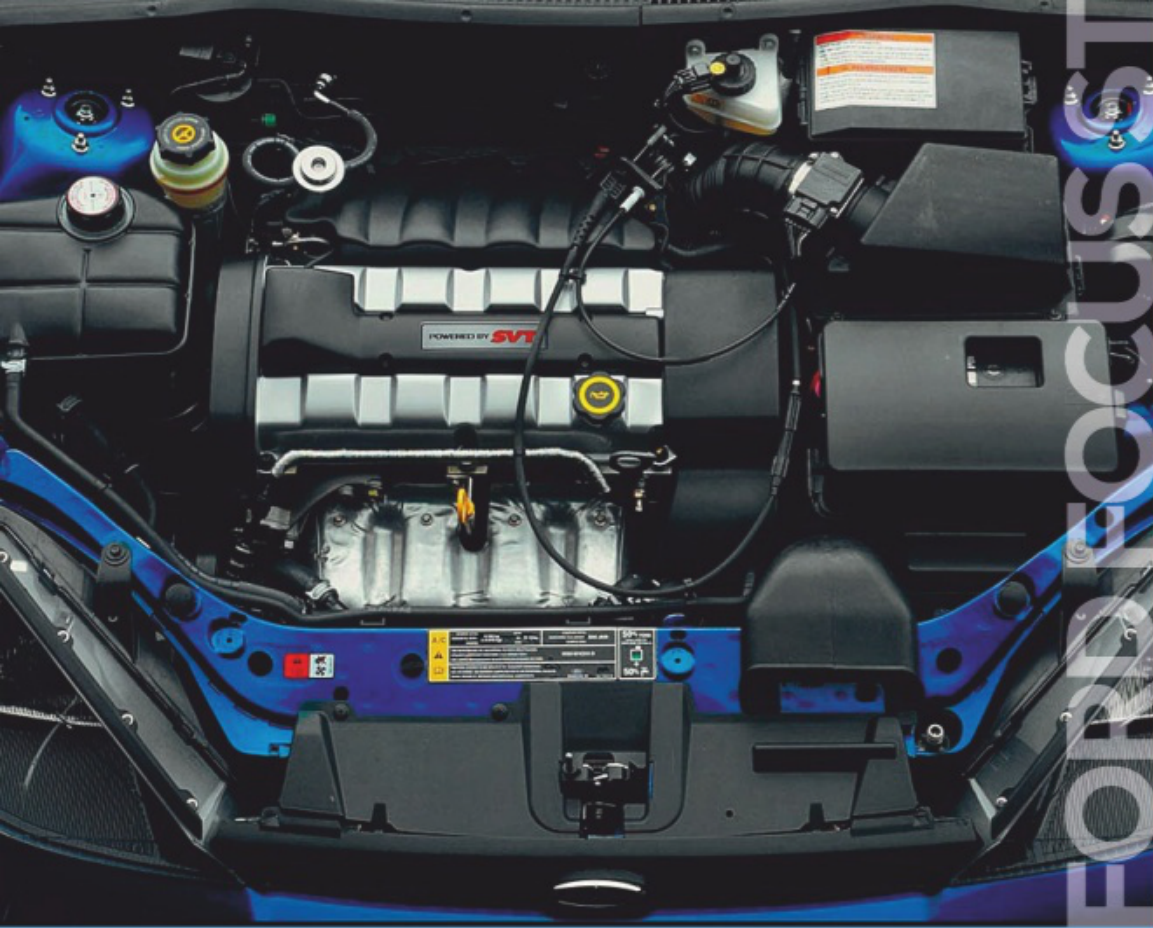
Offered in six trim levels, all featuring straight-six hearts, and three transmission options, standard equipment included a front strut brace, cabin navigation, power-assisted seats, and air conditioning. The entry-level package (20) came equipped with

Toyota's 1G-FE, which packed 118kW and 200Nm, and was only available with an electronically controlled four-speed automatic transmission. The 20Four and 20Four G Package offered permanent all-wheel drive, with the G Package adding alloy wheels and leather seats. The 1JZ-FSE was introduced with the 25 and V25 models, outputting 147kW and 250Nm, and both were fitted with a five-speed electronically controlled automatic. The higher spec'd V25 offered a rear strut brace, 17-inch alloys, and leather seats.

And in a throwback to the Tourer V of the Verossa predecessors, the VR25 featured the single-turbo version of the 1JZ-GTE found in the JZX110 chassis and cranked out 206kW and 377Nm. An R154 five-speed gear-swapper backed the 2.5-litre heart — you could option the four-speed automatic found on the 20 model, if you were that way inclined — and included a limited-slip diff (LSD). Front and rear spoilers could be optioned, while standard equipment saw front and rear strut braces and 17-inch alloys. The VR25 may currently be priced a touch outside of the \$10,000 bracket, however, when compliable in 2021, a flood of imports should help drive the price down and open up availability.

You'll either love or hate the Verossa, but even if it isn't your flavour at first glance, it's funny how quickly it will grow on you if you see it enough.





FORD FOCUS ST – 2002 TO 2004; 2005 TO 2010

This one option offers up two solid choices in the \$10K price bracket: the first-gen ST170 and the second-gen Focus ST (XR5). The easiest to get your hands on, and perhaps the best option when it comes to modifying, is going to be the first gen, which was launched in 2002. Officially called the 'ST170' (production codename: 'Piranha'), it was adapted from the facelift version of the standard Focus with cosmetic upgrades that included 17-inch rally-inspired alloys; honeycomb 'tech flec' front grilles; round projector-style fog lights; colour-coded bumpers, side trims, and door handles; and, in Australia (therefore here too), a locally developed bodykit. Inside, you were treated to additional airbags, optional half- or full-leather Recaro seats, optional audio equipment for better doof doofs, and standard brushed aluminium door releases (because: race car).

Cosmetic changes aside, the real charm of the ST170 is the power plant that it derives its model name from: a 170hp (127kW) generating two-litre Duratec (Zetec based). Developed by Cosworth, power is increased from 95kW over the base models to that whopping 127kW. This comes by way of a high-flow alloy head, variable valve timing, dual-stage intake, stainless-steel exhaust, and a Cosworth exhaust manifold. Backed by a Getrag 285 six-speed manual box directing drive to the front wheels, you

also received larger brake discs (300mm fronts, 280mm rears), and the power steering was revised with a close-ratio rack. With the same motor found in numerous Ford and manufacturer-partnership models, the aftermarket support is vast and almost any performance modification can be bought or easily adapted from later incarnations. With an average purchase price of \$5K, you'll have plenty left in the bank to get busy chasing more grunt! And if you're questioning the exterior aesthetics, just ask Team Cream how good they can look with a ton of low and a good set of wheels (refer to the 2018 V 4&Rotary Nationals).

The alternative option, if you're looking for something a touch more modern, is the second-generation Focus ST introduced in 2005. Known locally as the 'XR5' (five-door hatch only), the ST was offered as a three-door or five-door hatchback and used a 2.5-litre five-cylinder Duratec ST, this time turbocharged, producing 168kW. Ford produced a pre-facelift and facelift version — although you may have a hard time finding a facelift model in this price range. The automaker also teamed up with English automotive engineering company Mountune Racing to release a power upgrade kit that consisted of a K&N panel filter, larger intercooler, and remap, which bumped power to 190kW, meaning that good gains can be made, and pushing it out to over the 200kW mark wouldn't break the bank.

“
WITH AN AVERAGE PURCHASE PRICE OF \$5K, YOU'LL HAVE PLENTY LEFT IN THE BANK TO GET BUSY CHASING MORE GRUNT!



BRIAN FORTAK
PHOTOGRAPHY

“

5.6 SECONDS FROM ZERO TO 100KPH
MADE IT BOTH THE QUICKEST SEDAN
IN THE AUDI LINE-UP AND ONE OF THE
QUICKEST IN THE WORLD AT THAT TIME.

AUDI S4 – 1997 TO 2002; 2003 TO 2005

Like the Focus ST, you have two options when it comes to the Audi S4, and which one you choose is going to be based primarily on your affinity for either one of their very different power plants. First, there's the second-generation S4 (B5/8D), which debuted in 1997 as part of the facelifted B5 platform Audi A4 line-up. In addition to being offered as a saloon (sedan), an estate (wagon) version — the Audi S4 Avant — was offered from 1998. In the engine bay, buyers were treated to a 2.7-litre twin-turbo V6 that packed 30 valves between the two alloy heads — packed with twin hybrid-driven double-overhead cams and variable valve timing on the intake valves — with a strong cast-iron block. BorgWarner K03-series huffers cranked through twin side-mounted air-to-air intercoolers to make 195kW. The driveline consists of the six-speed C90 manual gear-swapper, which had been carried over from the earlier generation — an optional five-speed ZF 5HP19 Tiptronic automatic was also available — and Audi's Torsen T2 Quattro permanent all-wheel-drive system. The factory-claimed 5.6 seconds from zero to 100kph made it both the quickest sedan in the Audi line-up and one of the quickest in the world at that time.

The third-generation (B6/8E/8H) saw the previous generation's twin-turbo V6 powerhouse replaced with an all-alloy 4.2-litre V8 based on that found in the Audi A8. It produces 253kW with 410Nm of torque, making it more lethal than the RS2 Avant and almost more powerful than the earlier generation's RS4 version (which still routinely sell for mid-to-high six-figure sums). Like its predecessors, the B6 S4 came standard with a Getrag six-speed (M6S) manual box and Torsen T2 Quattro permanent all-wheel-drive system. Additional features included the electronically controlled, variable-assisted Servotronic rack-and-pinion power-assisted steering as standard, and ventilated 345mm front and 300mm rear discs clamped by Continental single-pot sliding calipers.



FORD FALCON XR6 TURBO – 2002 TO 2005; 2005 TO 2008

And we've saved the 'best' for last! The Ford XR6 nameplate has been in use at Ford Australia since the late '70s, though most of you will know it best for the introduction of the increasingly popular Barra turbo. We'd enjoy nothing more than to sit here and urge you to blow your hard earned cash on the filthiest of AU Falcons, but it was never offered in turbo form and really doesn't have much of anything to offer over the Barra-equipped examples you can pick up for under \$10K. With that in mind, your best bets are the BA and BF XR6.

The BA four-door sedan was produced from 2002 until 2005 and was based on the previous AU bodyshell with significantly revised styling. It was the first to sport a turbocharged variant of the four-litre Barra (240T), seeing power figures bumped to a hearty 240kW and torque at 450Nm. Similar to the naturally aspirated (NA) 182 base version, the turbo variant was fitted with lower compression pistons in anticipation of boost, which is delivered by a factory-fitted Garrett GT3540R huffer. It also received upgraded exhaust valves, a higher base fuel pressure, and side-mounted intercooler (identified by a red rocker cover). Gear-swappers were a choice of five-speed BTR T5Z manual or four-speed BTR M95LE automatic, with the manual option being less common to find on the market. The XR6 can be most notably identified over the base XT and Futura models by the headlights, which feature a single tear-drop design that extends into the front bumper. A MkII version was released in 2004 that included a double-tear-drop headlight design and a new six-speed Tremec T56 manual.



As for the BF, launched in 2005, a revised version of the Barra (245T) saw power increased to 245kW and torque up to 480Nm. The Garrett GT3540R was carried over from the previous version, while the injectors were upgraded to larger units. From 2006 onwards, Barra 245Ts were fitted with stronger rods after concerns of them bending arose. In this generation, the XR6 Turbo could be purchased in ute form and, like the BA, can be identified over the base XT and Futura models by the headlights. The BA MkII six-speed Tremec T56 manual was also carried over with an optional six-speed ZF automatic, which was offered in place of the BA's five-speed option. The BF marked the last of the Australian-made Falcons.



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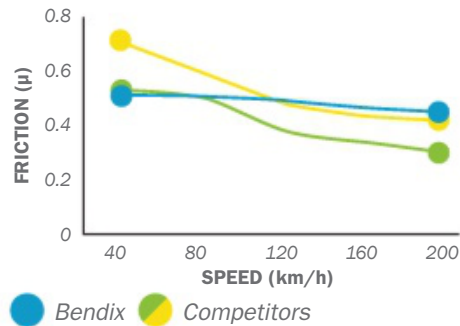
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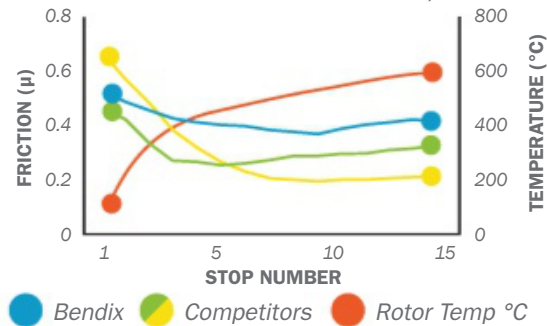
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THE ROAD TO 400MPH

PART 2

WE FOLLOW THE LEAD-UP TO COOK MOTOR RACING'S 2019 BONNEVILLE ASSAULT, AND THE BUILD OF THE 1000-PLUS-HORSEPOWER SR20 TURBO POWER PLANT WITH WHICH IT HOPES TO CRACK 400MPH AND THE TWO-LITRE GAS RECORD

WORDS AND PHOTOS: MARCUS GIBSON

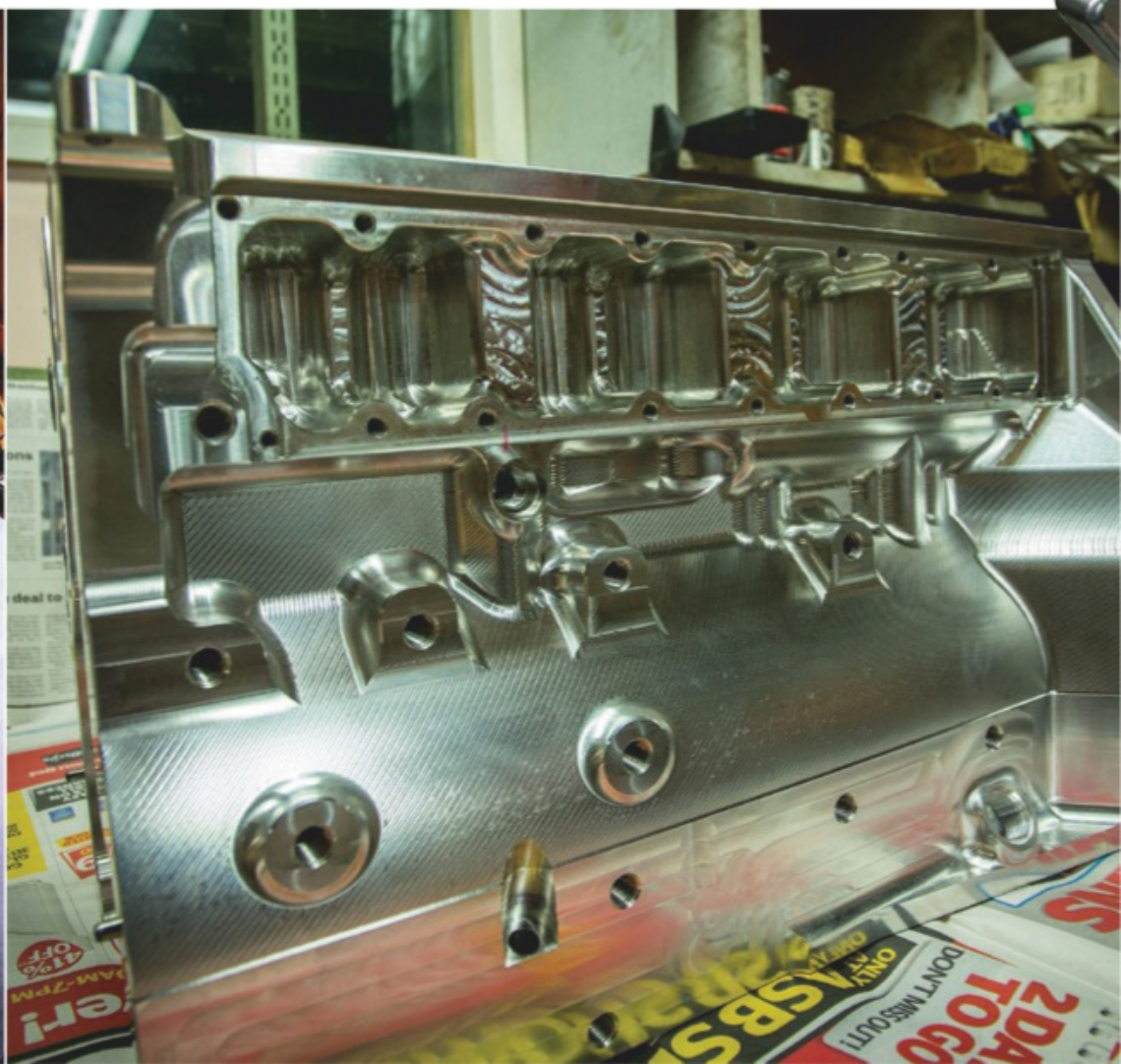
If you missed part one of the 1000-plus-horsepower (746-plus-kilowatt) pump-gas SR20DET engine build for Cook Motor Racing (CMR) last issue, we suggest that you go back and read that before following on with this here. The couriers we mentioned in that article have indeed been running red hot. The team is now in possession of a pair of billet SR20 blocks out of Australia — Reg Cook did not have time to machine any locally as was done previously with CMR's Synergy-powered record attempts.

The team is planning to build four complete SRs for the assault: two mule engines using factory SR blocks and some lower cost, off-the-shelf

components, and then two complete race engines using the billet blocks, cranks, and all the high-end components — the kind of stuff that is either yet to be finalized or simply too expensive to risk during this test phase.

The mule engines will see some serious dyno time, as Reg explains: "We did 427 runs with the Synergy V8 — that's the level of detail that will go into the tuning. I would be expecting to get to 120 runs before we're finished with the SR and we have to do that. Do I want to? No; I'd rather just go and buy stuff, but we can't."

However, before the team can hit the throttle on the Superflow engine dyno, some engines need to be completed.



THE BILLET BLOCK

Engineered by Bullet Race Engineering in Australia, and proven in such cars as the World Time Attack Challenge (WTAC)–winning Hammerhead S13 of MCA Suspension, the two billet blocks have been machined from 6061 aircraft-grade alloy. The blocks are what is known as ‘dry deck’, meaning they do not have any passages through which water can pass from the block to the head.

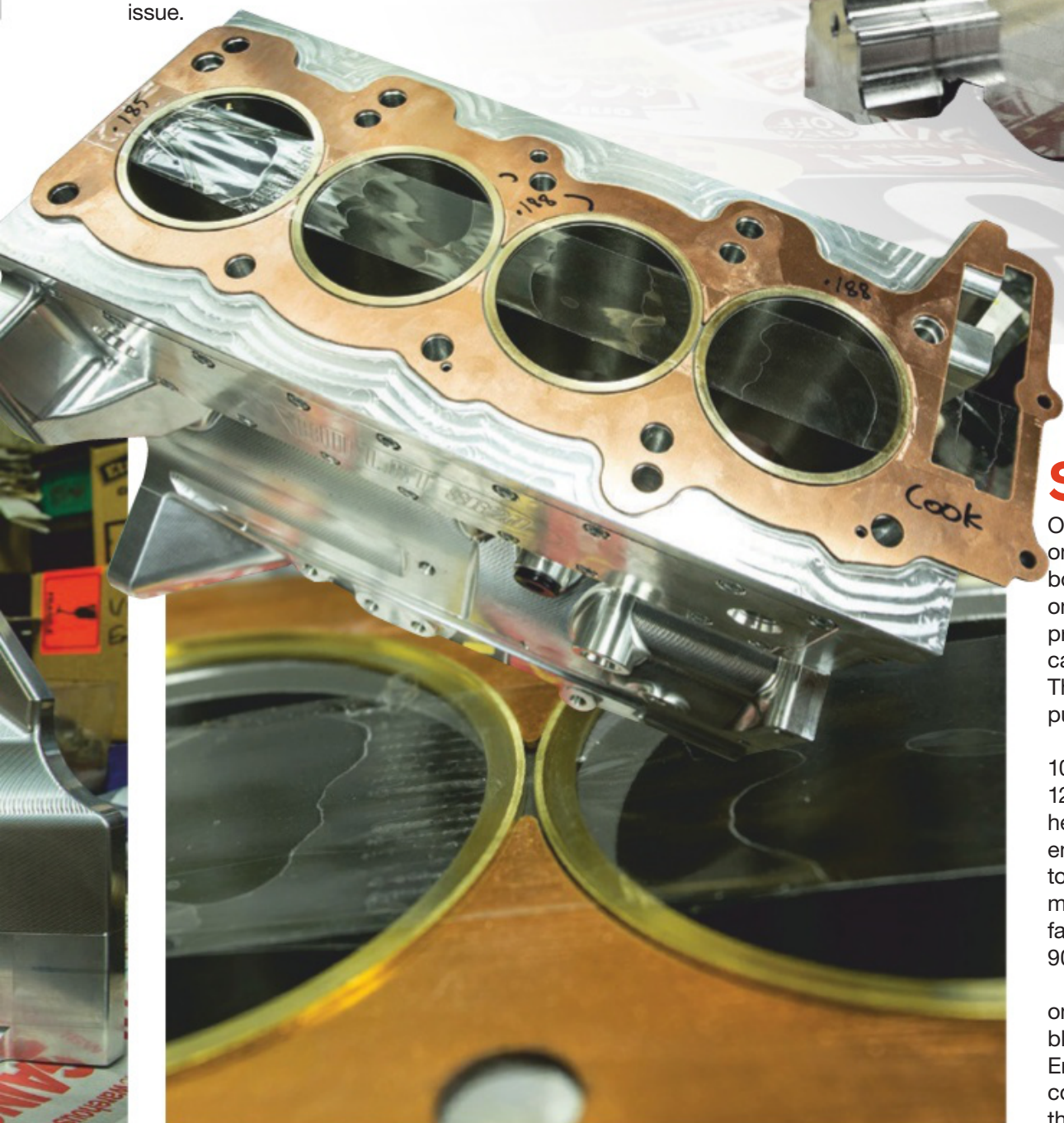
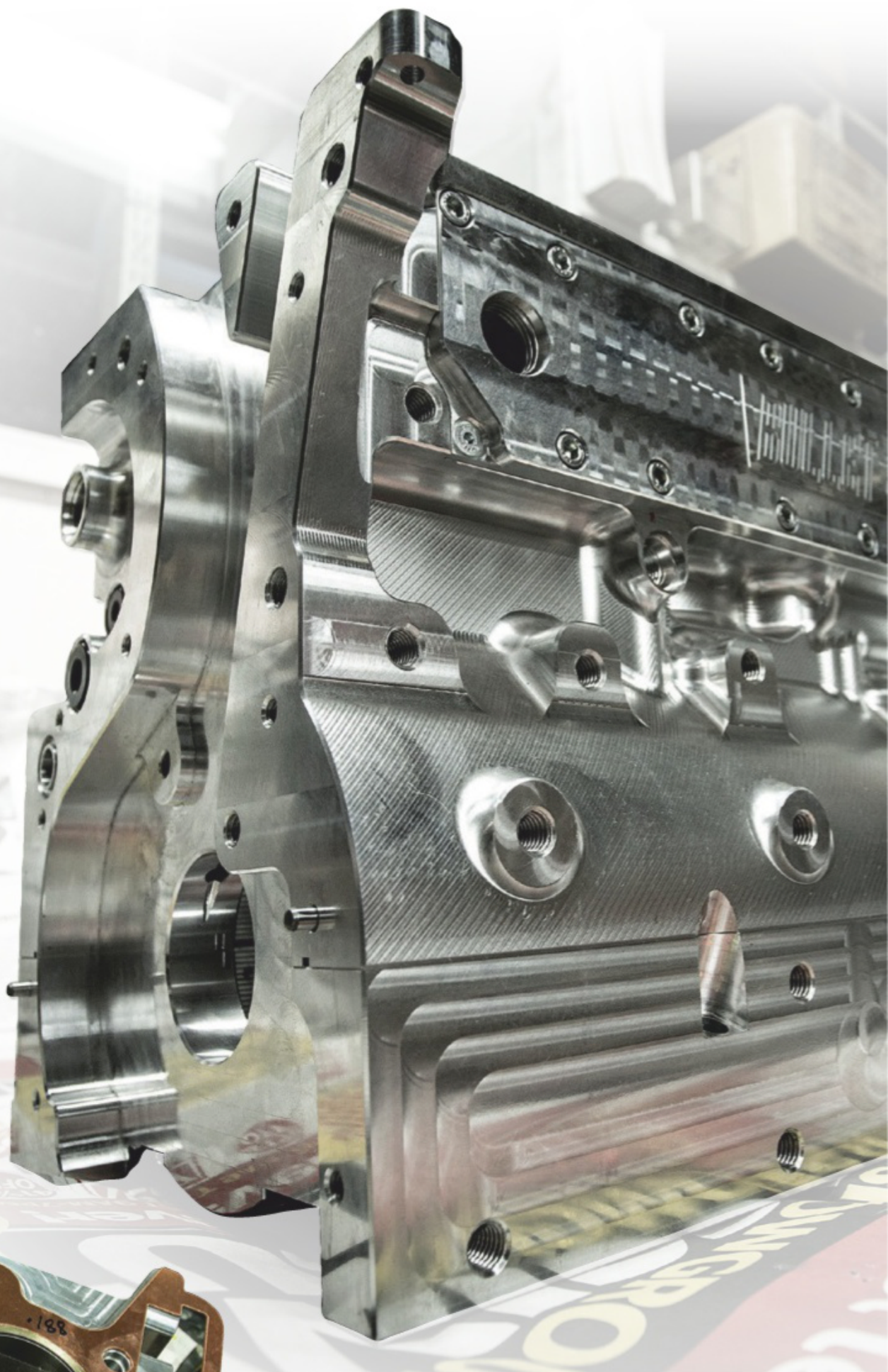
Reg explains why: “Clamping the head to the block is very difficult. If the head lifts and any gases escape, [they] would get into the cooling system and push out the coolant.

“Cooling the four cylinders is achieved by two machined galleries sitting each side of the cylinders. These are capped with billet plates with both an inlet and an outlet. No water passes from one side of the block to the other, resulting in more strength supporting the sleeves as there [are] only four oil passages; apart from that, it’s solid 6061 surrounding them.”

A total of 3kg heavier than the factory block, it’s weight well spent. The deck thickness is greatly improved, as is overall rigidity. The other great improvement is that the block is two piece with integrated four-bolt main caps using $\frac{7}{16}$ ARP studs, which will hold the block square — a known weaker point in big-power factory-blocked SRs. While the two billet blocks arrived at CMR basically ready to go, the final bearing clearances are still to be settled on, so further machining might be required.

“Everyone is telling me that, while billet blocks are strong, because of the mass of alloy, they expand a lot, so we’re going to start with the tightest clearances we can get away with,” says Reg. “The crank will pretty much be touching the bearings when cold. We’re hoping to open up all the oil galleries so the oil has good flow when cold, and will be able to keep up once it’s hot. For the main bearing clearances, we are going to start off between 0.5 and 0.9 thou when it’s cold, as both the block and bearings will grow. People talk about putting blocks in an oven to check the clearance, but we’d need a big oven and it would take a long time to get this engine to 100 degrees — but it would be a worthwhile exercise as people would be surprised at just how much the block will grow.”

We’ll have more on finalizing the bearing clearances next issue.

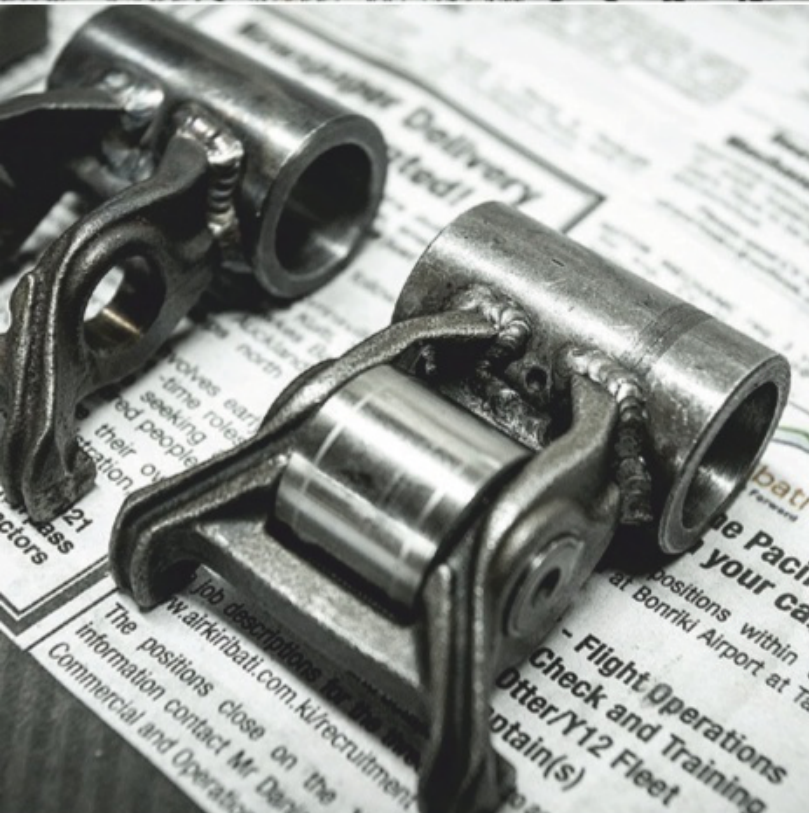


SEALING THE HEAD

One of the biggest challenges will be keeping the head clamped once the boost is ramped up in excess of **XX**. While the exact boost pressure is yet to be sorted, it’s a 1200hp (895kW) SR on 98-octane fuel, so, yeah, it’s going to require some serious pressure inside the combustion chamber. To hold the factory cast head down, $\frac{1}{2}$ -inch ARP aged 625 studs are being used. These are the latest from ARP, and are so strong that they will pull straight through the head.

As Reg explains, “We will torque down to between 80 and 100 foot pounds [108 and 136Nm]. People talk about going to 120 [163Nm], and, while the bolt is capable of that, the factory head is not. To achieve that, you’d need a billet head. When the engine is cold, it’s got rigidity, but as soon as it’s hot, if clamped to 120, it will start deforming the bolt holes and the head will mould around them.” To put those figures into perspective, the factory torque setting is 30 foot pounds (41Nm) — go another 90-degree turn.

The head gasket itself is of copper construction, and its only job will be to seal the oil passages passing from the block to the head. Sealing each cylinder is done by Bullet Race Engineering fire rings. These are a phosphor-bronze compression ring that sits inside the head gasket and cuts into the sleeve when clamped down.



INSIDE THE HEAD

Using factory castings as the basis, the team is currently finalizing the final details of the heads' specs. We were able to check out one of the mule engine heads, which gave us a good indication of just how modified the final products will be. Ported and polished by Mark Bradley when he was working at CMR, the ports are huge, and the combustion chambers have been reshaped to mould the face of the valve into the head for better flow. For the mule engine, Supertech 1mm oversized inlet valves and 2mm oversized exhaust will be used. Reg tells us that he is not a fan of running 2mm oversized intake valves, as the increase in performance doesn't outweigh the extra cost of machining and reduced reliability due to the need to retrofit larger valve seats. In the record-attempt heads, the factory seats will be reshaped to suit. The valves will be 1mm oversized Ferrea Comp Plus valves for the inlet and Inconel for the exhaust with copper/bronze valve guides.

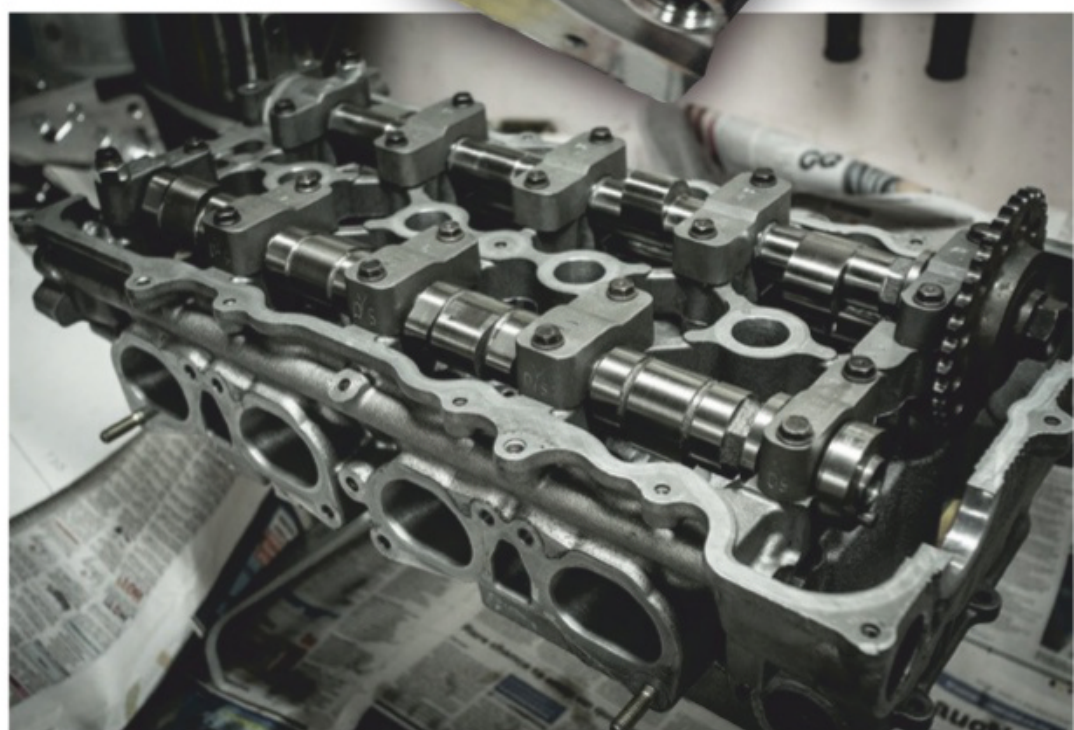
The valve springs to be used are yet to be finalized, although Reg is leaning towards Beehive as used in his naturally aspirated (NA) record-setting SR20 in 2011. These allow for a weaker seat pressure than dual springs. It's all part of the theory to stress the factory alloy as little as possible in the hope that it will survive long periods at high rpm and boost and the extreme temperatures that this will lead to. The fear here is that, if the springs are too strong, they will deform, shift, or simply pull the valve seat through what little alloy is holding them in place.

We touched on the custom roller rockers to be used last issue; these are customized P11 rollers welded to a new housing that deletes the secondary arms. They are a trick little invention that allows for some serious lift and duration to be employed. The exact final profile will be settled on once this first mule engine hits the dyno late this month.

Another decision that will be finalized on dyno early on will be whether CMR runs variable inlet cam gear as seen on Hans Ruiterman's big-power SR S14.

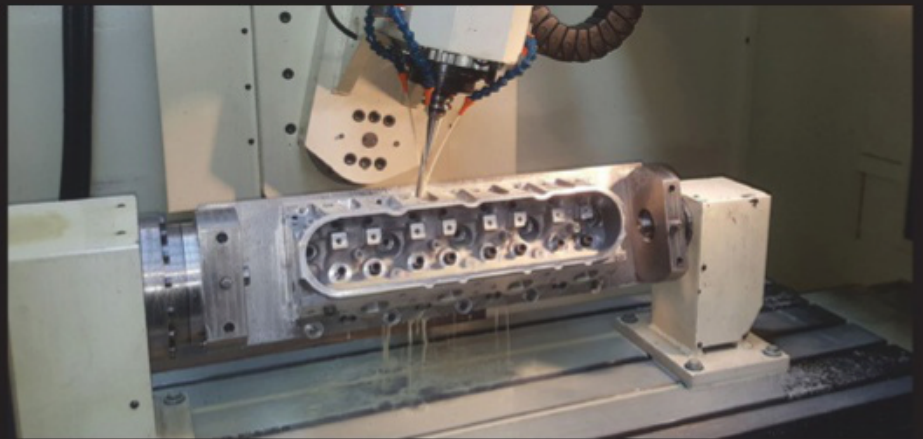
"We are going to test that by tuning the engine and then do a power run from, say, 1000 to 5000rpm and see what it makes. Then, we are going to advance the inlet pulley one complete tooth and do another power run. If it's a big advantage, we will modify the head to use [a] variable-timing pulley. Some tuners swear by it and others say it's a waste of time, but we will see. We need to know, as we need to be making boost as soon as possible," Reg explains.

By the time the next issue goes to print, Reg will have been to Australia to visit Collin Willshire of Jett Racing. Collin is the man behind the world's fastest four-cylinder. The pair will cover off many aspects of the build yet to be decided on, including compound turbocharging. Check the next issue to find out more.



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NAME: RIZVI AZAAD BUKSH // **AGE:** 28
LOCATION: AUCKLAND // **OCCUPATION:** BARBER



NZ Performance Car: Hey, Rizvi. Sweet R35 you have there — how'd you get into modified cars?

Rizvi: Hi, guys, thanks! I blame my older brother Sam for getting me into cars at a very young age. He would be playing with cars, so I would want to do the same. My first was a '92 Honda Integra DB8 — DOHC VTEC!

Perfect example with which to introduce yourself to the redline! What types of cars did you own after that?

I've had two more Integras — one was a '96-spec Type R. Then I had RX-8s followed by two R32 GT-Rs, and now this.

They seem to come in twos. What was it about the R35 that made you want to buy one, and were you hesitant to modify it, being a higher value base?

I've always appreciated Nissans for their build quality and range of models, especially the GT-Rs. Having owned those two previous R32 GT-Rs, and with the reputation of the R35 GT-R, buying a Japanese supercar was an easy pick! In terms of modifying it, you'd think so, but it wasn't really hard — I mean, it's standard procedure for any car enthusiast, isn't it? You're never quite happy with the stock form, so you're constantly looking for upgrades. Even now, I'm still looking for upgrades that can be made.

Fair call that; no car is every truly done. What was the aim for the car, and how big of an improvement have the mods made?

I just wanted to have enough power to have some fun, but it still needed to drive smooth and be driven on a daily basis without issue. That's exactly what it is now, and, yes, I do drive it to work and back. The result of the modifications was a massive improvement. All the common problems that come with the '08-'11 models have been taken care of, and it has more power while still being a smooth drive. The R35 GT-R comes pretty fast stock, but you always want to go faster, especially on the track.

Do you have more plans for the future?

Yeah, heaps of plans. Eventually, we'll forge the motor and go for bigger turbos for more boost, but we'll have to see how much further it goes from there. Only time will tell.

It never stops, does it, Rizvi? Cheers, man.



specs

ENGINE: VR38DETT, 3799cc, V6 twin-turbo; 76mm intake pipes, Ramair 90x125mm cone filters, custom titanium intercooler piping, twin Walbro 450-litre-per-hour E85 fuel pumps, Fuel-It E85 flex-fuel kit, GReddy 14mm high-flow fuel rails, twin HKS SQV4 blow-off valve (BOV), Logic straight-through downpipes, AAM Y-pipe, HKS Legamax titanium exhaust, Full Blown Motorsport (FBM) coolant-expansion tank, Mine's dry-carbon engine cover, Boost Logic OCC breather kit

DRIVELINE: Nissan six-speed dual-clutch transmission, Dodson Motorsport upgraded diff clutch basket, Dodson Motorsport upgraded circlips, Dodson Motorsport Super Stock seven-plate clutch kit, updated transmission software, DBA 5000 series slotted rotors

INTERIOR: Dry-carbon door trim, dry-carbon centre console, dry-carbon steering-wheel centre, dry-carbon air vents, dry-carbon Autotecknic extended paddle shifters, Bride Stradia II Alcantara carbon-fibre front seats (track), R35 Premium Edition seats (street), Bride front and rear floor mats, custom Bride door-card trim

EXTERIOR: Zele dry-carbon bodykit, Dodson Motorsport carbon-fibre lip, dry-carbon front grille, dry-carbon intake scoop, carbon-fibre bottom wing mirrors, Tommy Kaira Rowen illuminated front and rear emblems, aftermarket smoked tail lights, carbon-fibre side grille panels

WHEELS/TYRES: 20-inch OEM, Michelin Super Sports, nitrogen-filled, Dodson Motorsport titanium wheel nuts

SUSPENSION: H&R 20mm drop springs

POWER: 475kW

FUEL TYPE: 98/E85

TUNER: ST Hi-tec

THANKS: Glen Stanley; Iain at ST Hi-tec; Michael at Dodson Motorsport; Ashwani Kiki Lal; my parents, Shareen and Kalam; my older brother, Sam Azad; Zeena Azad; Ahdeem Shah; Shelvin Lal; Amir Khan; Shazil Khan; Zainal Ali; Dean Zaidur; Ravi Lal; Elvish Kumar; Shalvin Sharma; the boys at NS Spec Motorsport; Kaushish Siwan; Zan Dean; and Toufiq Nazeer



BABE



Renue



NAME: CALEB HART // **AGE:** 25
LOCATION: PUKEKOHE // **OCCUPATION:** BUILDER



NZ Performance Car: Hey, Caleb. Is this the first S15 that you've owned?

Caleb: Hi, guys. Yeah this is my first one. I've been wanting to own an S15 ever since a good friend, Jeven Judge, had one in the same colour that was super low over a good set of wheels, which looked amazing seven years ago. That sold them for me, and I had been looking for the right one from then on. I went as far as viewing one in Rotorua that I didn't buy, same with another in Matamata. Hard to find a tidy example now.

Like most cars now. How'd you get into cars, and what was your first modified example?

I suppose I've always had that interest since I was young, but it was probably my old mate Scott Virtue who first pushed me into wanting a modified car after seeing all the insane builds he's done (currently a 650hp [485kW] VTEC build) and I wanted to follow. My first modified example was about 10 years ago now, a Nissan Pulsar GTI-R.

Since you've bought the S15, what has the goal been?

From the beginning, the goal was to keep the car very stock. I think they are near perfect-looking stock, so just add some factory aero and S15s are perfect. So it was just a OEM-plus build really.

And how hard was it to find all those aero pieces to put it all together?

Funny enough, it was the Ganador mirrors that took the longest to find. I got constantly outbid on Yahoo! Japan auctions until Jesse Streeter jumped in to help out, as his mate was selling a pair, which these ones are. The wheels also took a while to source and had to be purchased as two separate pairs. Almost everything was sourced from Japan with the help of Streeter.

It's been an ongoing project — is there anything you wanted to add to it that you haven't yet?

Yeah, power. I do plan to spend some money on the engine now that the exterior is how I want it. I'd also like to upgrade the coilovers, as they are at the limit, so some 326power coils will be on that list too.



And what kind of driving does it typically see?

Well, for all of last year, I was living and working on Waiheke during the week and coming back for the weekend, so it hardly got driven, only [got] seen around Pukekohe on the weekend when I was back. Now that I'm based back in Auckland, it's used for plenty of cruising with mates and a bit of daily-driving when I'm not having to lug tools about.

Good-looking and versatile. Thanks, Caleb.

specs

ENGINE: SR20DET, 1998cc, straight-four; GReddy front-mount intercooler, custom stainless-steel turbo manifold, custom three-inch exhaust, Bosch 044 fuel pump, Peter Brock Energy Polarizer

DRIVELINE: Nissan six-speed manual gearbox, OEM clutch, R33 GTS-25T front calipers, slotted rotors

INTERIOR: Bride Ergo driver's seat, Bridge floor mats, Nismo 280kph cluster, Parts Shop Max shifter knob, Nismo lighter kill switch, A'PEXi boost gauge

EXTERIOR: Nissan aero front bumper, side skirts, end caps, and boot spoiler; aftermarket splitter kit; blue-lens Ganador wing mirrors; Yashio rear LED tail lights; Nismo clear side indicators; spoiler lip

WHEELS/TYRES: 18x9.5-inch (+12) Rays Volk Racing TE37, 225/40R18 Triangle Sportex

SUSPENSION: BC Gold coilovers, BC Gold adjustable camber and toe arms

THANKS: #1 DROP (Michael Lucas), for pushing me to hurry up and buy a car; Vicky from Rotorua, for all the help with the whole process; and Bodrum Kitchen, for always supplying the food!





1. IT'S FASTER THAN YOU THINK

While people are bagging it for being based on a BMW Z4, the truth of the matter is: it's a fast car. The advertised power figure of 239kW is probably a little ambiguous, given that the Z4 M40i-derived B58B30 makes an advertised 285kW in the Z4.

Chief engineer Tetsuya Tada has said: "One day, perhaps, we [will] cut the speed limiter and try the Time Attack [on the Nürburgring], but even just driving it as it is, it's really fast. On the old course, it's very easy to break eights; 7.5, 7.4 — it will do that easily."

2. IT'S SUPER RIGID

Get ready to three-wheel over some ripple strips! It's been revealed — again by Tetsuya Tada — that the chassis has achieved supercar performance without the associated production cost, exotic materials, or construction technique: "It's actually the same level of rigidity as the Lexus LFA supercar, and it has been achieved without using carbon fibre so we could keep the price point at an affordable level. That was the most difficult thing to achieve."

3. PEOPLE ARE ALREADY SWAPPING IN THE 2JZ

Daigo Saito and Masato Kawabata are both putting 2JZ-swapped Supras together for D1GP competition. While we'd love to see them play with the BMW heart and make that work, the fact that both teams know how to extract over 746kW from a stroker 3.4JZ means that it makes sense that they went the easy route. We also hear that CX Racing is working on a kit.

4. IT'S GOT 10 FAKE VENTS

Probably the saddest fact is that the road-going Supra A90 has not one but 10 fake vents. Fake vents have no place on any car, period! So, despite Toyota trying to justify them by saying that they are functional on race versions such as the GT4 concept, it's not OK to have them blanked off if Toyota wants us to take the Supra seriously!

5. ROCKET BUNNY IS ALL OVER IT

Even before the car has been seen in the public domain, Kei Miura of TRA Kyoto (Rocket Bunny) has worked his magic on the body shape, and the kit is available for pre-order. What excites us about it is that it's a step away from previous Rocket Bunny fender designs and is probably the company's most wild kit to date. It works really well with the Toyota shape — in fact, it plays off the original concept so well that the automaker should sell it as a special model.



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ALWAYS WATCHING

There's wild stuff going on out on public roads, so don't be left wishing you'd put a dashcam in your car when video evidence could have made all the difference! Whether it's for simple peace of mind, security, or crucial evidence in the case of a crash, the Gator GHDVR82W dash camera records full-HD 1080p footage through a 152-degree wide angle lens. You can connect to the GHDVR82W through your smartphone, too, allowing you to access and playback recordings on the fly. A built-in G-sensor with adjustable sensitivity saves impact footage, and a seamless loop recording functionality ensures it continually records when the vehicle is driving. And with a discreet compact cylinder design, the dashcam mounts to your car's windscreen behind the rear-view mirror without impeding the driver's field of view.

The Gator GHDVR82W is available from leading automotive stores. For pricing contact your local stockist. Further information can be found at griffithsequipment.co.nz.

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DON'T GET COOKED

Heat surging through your engine because of a coolant temp spike is almost guaranteed to cook something, and we all know that heavy traffic is the perfect scenario for this to occur. Keep an eye on your water temp with the Auto Meter Phantom 2 Water Temp 100-250F 2-inch Short Sweep Electric, which includes the advanced 1/2-inch NPT temperature transducer for a simple installation on any application.

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CLEAN FUEL

If you aren't already running a fuel filter in your fuel system, get that sorted ASAP, and if you are, yank it out and get yourself a Holley 795.5lph Billet Fuel Filter instead. Holley's new Billet Fuel Filters are precision CNC machined from 6061-T6 billet aluminum for strength and durability, and feature a black bright dip anodized body and clear bright dip anodized ends for superior corrosion resistance. With its Female 8AN inlet and outlet, the internal 10-micron depth media element will rid your system of any nasties.

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If you're keen for the open-air feeling of a motorcycle but want the stability of a dialed-in sports car, it would be worth your while to take the new offering from Can-Am for a test ride. The new Ryker has everything you need to take on the open road, and, better yet, you don't need a motorcycle licence to ride, just your full car licence.

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NO LAG

The new fresh-air Anti-Lag Valve from Turbosmart, the ALV40, diverts charged fresh air from the turbo safely into the exhaust manifold pre-turbine. This means safer spooling of the turbocharger, avoiding the throttle-based anti-lag that can stress the engine and break connecting rods. The sealed twin-chamber design allows air to bypass into the exhaust manifold through the primary control port, while the lower chamber controls the valve irrespective of manifold pressure, and allows for leak-proof operation.

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REGULAR UPDATES FROM THE DINZ NATIONAL DRIFTING CHAMPIONSHIP

WORDS: JADEN MARTIN PHOTOS: KEEGAN CLARKE-LATHAM



ROUND THREE RESULTS

TRACK: HAMPTON DOWNS MOTORSPORT PARK
WHEN: 16–17 MARCH 2019

PRO CLASS

1. **DARREN KELLY** — Nissan R35 (RB32)
2. **MATTY HILL** — Nissan S15 (2JZ)
3. **DAYNOM TEMPLEMAN** — BMW E46 (2JZ)

PRO-SPORT CLASS

1. **JORDAN JOYCE** — Nissan S13 (RB25)
2. **AARON HYATT** — Nissan S14.5 (2JZ)
3. **TAYLOR JAMES** — Nissan S14 (RB25)

HAYMAN MOTORSPORT RETURNS

If you've been following the series for near on a decade or have found yourself in the pits from time to time, you'll probably recognize the name 'Eddie Hayman'. He's been in and around the series for longer than even he can remember, having grown up watching and following the path of the series OGs such as Adam Richards, Justin Rood, Tiger White, Sean Falconer, and Victor Chapman, and initially competing in Pro-Am — the predecessor to the current Pro-Sport class — back in the 2011–'12 season with a 2JZ-GTE-powered Nissan Cefiro.

Eddie tells us that he realized after that season that he didn't have the means required to commit to a full competitive campaign, instead turning his attention to helping out the Nico Reid Drift team when Nico stepped up into the Pro class in 2011. Subsequent years have seen Eddie crewing for Daynom Templeman; Ben Wilkinson; and, most recently, Michael Thorley and Gagan Kang.

"I've really enjoyed being part of the environment and learning from behind the scenes with them all. However, while ticking off personal goals and helping the lads compete, I have held onto the car and tossed my hat into the ring to drive at competitive events such as the NAC Drift Series, Battlemania, and Naki Drift," explains Eddie. "With both Mikey and Gagan competing this season, I have had a spark of enthusiasm and it fuelled the fire, pushing me to get my car ready to compete in the last three rounds of the 2019 season."

Eddie acknowledges that, while he's been absent from the driver's seat in D1 for the last seven years, the level of competition in Pro-Sport has ramped up hugely. Round three proved to be challenging.

"I didn't do as well as I had hoped, mainly due to my own errors; we'll be dialling in a few changes over the next couple of weeks to see if we can get to Pukekohe with a package that will allow me to go toe to toe with the rest of the field," he says. "I've never had the opportunity to drift at Pukekohe or Manfeild with a well-prepared package like this, so I'm really looking forward to the two final rounds of the season."

Regardless of how the rest of the season pans out, Eddie tells us that he will be in and around for many more years to come, and he is already on the hunt for fresh sponsors to see a full season campaign in 2020.

Check out 'Hayman Motorsport' on Facebook to follow his progress.



COLE ARMSTRONG DEBUTS G36

Back in *NZ Performance Car* Issue No. 211, we debuted Cole Armstrong's fresh Skyline G35 comp car on the cover. That incarnation broke the internet heavy, not just for the fact that a big-bodied four-door like the G35 had come to the series but also because of what was hiding under the bonnet: a 634kW ex-Nascar Dodge 5.9-litre V8.

After a few frustrating seasons spent trying to get the car to cooperate, with the engine getting hurt in the process, the team ditched the V8 in favour of Cole's trusty RB30 before switching back into the older R34 chassis and winning the 2017 Pro championship. Having used the R34 for local competition while using the G35 over in China, the team brought the car back to New Zealand shores last year and it has been in preparation for the 2019 D1NZ season ever since.

Cole tells us that long-time crew member Ross Honnor of Top Tune pulled the RB30 heart down to find the "the pistons seriously wrecked".

"Ross did his magic on the motor, replacing the pistons and rods that were damaged from the fuel we had to use over there, and redoing a few things while we had it apart. Played with the head and yeah," he explains.

The package now sports a new MSE turbo. Gone is the four-speed G-force gear-swapper in favour of a TTi five-speed sequential — a change influenced by teammate Darren Kelly, with Cole saying that he realized how

much drive can be gained from the launch starts with the TTi unit. The rear end has been upgraded to an all-Winters Quick Change affair, and the car retains the KW suspension, rebuilt for good measure.

Running gear aside, it's the car's fresh look that really piqued interest on its maiden return to the series at round three. It now sports a full cosmetic upgrade to the facelifted G36 styling and a whole lot of extra wide!

Cole admits that his cars have always been workhorses rather than lookers. "I wanted it to look awesome," he says. "We talked to Ryan at Luxury Sports to see what could be done, and there was nothing on the market for these; all we could find was a Liberty Walk-style kit for a V37.

"Not wanting to develop a whole new chassis, we did what Fanga [Dan Woolhouse] had done with the VE to VF upgrade. I bought a V36 road car for Mike at Keri Composites to take moulds from. He stripped the G35 back and moulded the Liberty Walk flares onto V36 panels and made them work on the G35. It was pretty full on."

It's been two years since the car last saw a D1 round, and Cole admits that it was a lot different to how he had remembered it, but he enjoyed getting back into the driver's seat of the big four-door. Despite being knocked out in the Top 16 battles, he remains confident leading up to round four at Pukekohe.



NOTE: *DUE TO THE DATES OF ROUND FOUR (PUKEKOHE) IN RELATION TO THE MAGAZINE'S PRINT AND ON-SALE DATES, WE ARE UNABLE TO PROVIDE RESULTS OR COVERAGE IN THIS ISSUE — CHECK THE NEXT ISSUE, NO. 270, FOR A FULL SEASON WRAP-UP.

TOUGH WEEKEND FOR THE LAURELS

While the champagne flowed for those drivers who had a stellar weekend of pedalling at round three, unfortunately, all three drivers campaigning Nissan Laurels had a rough weekend. First to feel the effects of round three was Team Thirty3 driver David Hunter, losing his RB30DET powerhouse to rod-bolt failure on his second practice lap on Saturday. It's been a hard run for the talented wheelman, who has placed well at most rounds only to suffer from mechanical failures, typically destroying big boxes — although an upgrade to a six-speed TTi sequential dogbox at the start of the 2019 season has helped with reliability. At this stage, it's unclear whether David will make it to the remaining two rounds.

The second Laurel to be knocked was a surprise entry by Josh Smith, who chucked together a secondary competition car while his primary LS-powered GT86 is still being dialled in. Steering bind gripped the car on the first lap and, with Josh unable to pull it straight, the Laurel went heavily into the wall at the track entry point before the initial corner.

The C33 of Vincent Langhorn was the only example left in contention, debuting a fresh build that took over from Vinny's long-serving chassis. In the practice sessions, it proved to be a scary prospect for his competitors to go up against in the Pro class. However, Vinny would sit the rest of the weekend out after a clash with the back of Joel Patterson's AE86 at the first switch entering

the section pushed the intercooler piping back into the Laurel's bay and snapped the turbo core.

While many drivers are moving on to alternative chassis, the long-bodied Laurels remain a crowd favourite and were missed in the battles. We hope to see all three back for the final at Manfeild on 26–27 April.





HYPER ESTATE

There's a million reasons to build a car exactly how you want it, and usually there's more than one thrown into the mix. For Hayden Wilson and his '98-spec Honda Orthia — originally powered by mundane B20B and automatic transmission, with such features as rear drum brakes and '90s-era ABS — it was the allure of modern power, reliability, and practicality that saw a K-series heart being shoehorned into the engine bay.

"I used to own an H22-powered Euro R, which I really enjoyed driving. That was sold for a[n] '05 DC5 Integra with the economy K20A3 motor, which I planned to swap with a K24, but it was sold before I had the chance," explains Hayden. "[I had] ideas of putting a K20 into a Civic hatch, but, with two kids, I still needed it to be a practical streeter that could be used on track. The Orthia ticks all that, with the ability to bolt a Civic front on; it seemed like a no-brainer."

As of right now, the Orthia is already home to the K20 motor, pillaged out

of the CL7-generation Euro R with the six-speed limited-slip diff (LSD) gearbox to match. The drums have been thrown in the bin, where they should be, in favour of disc brakes using DC2 Integra hubs, and the ABS has been deleted.

With the Euro R, from which the new heart was borrowed, running electronic power steering, and the Orthia hydraulic, Hayden has rigged up a hydraulic power-steering pump in place of the air-con pump on the bottom of the motor and used braided lines to plumb it all up. A set of Yellow Speed coilovers keeps it planted on the road, while the front end is now of the pre-facelift EK variety, as Hayden had planned from the get-go.

Hayden tells us that, despite what the photos may suggest, it's just a matter of finishing off a handful of small tasks. The wiring has just been completed, and, by the time you read this, it won't be far off starting and, hopefully shortly after that, making its maiden voyage.



MONSTER FOCUS

While most are busy playing with the usual offerings of go-fast steel, there are a few out there who go outside the confines of the norm to build a car that truly stands out from the rest. David Newton is one of those people, opting to transform his already-pretty-serious 2011 Ford Focus RS Mk2 into a Time Attack and Targa brawler, with ambitions of reaching the 750kW mark! He's enlisted the help of some pretty serious companies to do it too.

The car is reasonably rare to begin with, being one of three PB RS examples imported by Ford New Zealand.

David tasked Hartley Engines and Motorsport with building the block to 1120-kilowatt-capable specs, and that is currently under way. The head will then be treated to the same and will receive custom-specced CNC-machined camshafts to suit. R Developments is building the chassis to remain road legal and is currently working on the fuel system and brake lines, while an FIA-approved cage design is being planned. Torque Performance will take care of the electrical side of the equation, incorporating a Syvecs ECU to allow for multiple preprogrammed track options.

With the spec list that David is alluding to — which he is keeping close to his chest at the moment — the car is going to be a lethal package, one befitting all the World Rally Championship (WRC) styling that it currently wears, and is likely to have the ability to be on-the-fly tuned to suit whatever terrain it may face.



ON THE TAB

In the car world, nothing need go to waste — nothing — and Ben Castleman's BMW 335i (E92) coupe build is the perfect example of making the most of a situation. With the car still under mechanical warranty from when Ben purchased it, the three-litre N54 straight-six twin-turbo powerhouse suddenly seized due to leaking injectors. A new long block was fitted and paid for by the warranty claim, and all was good in the world.

What about that seized block that was pulled out, though? The company dealing with the claim didn't want it, and it was likely to end up at the scrapies. Ben wasn't about that, and saw this as the perfect opportunity to use it as the base for a power build while the car stayed driveable.

The first task was to get that bottom end sorted out. Glendene Engine Reconditioners (GER) is taking care of that, currently boring the block in anticipation of the forged rods and pistons it will be accepting. The huffers are now RB Turbo units, hybrids produced by BMW specialists of the same name out of St Louis, Missouri, in the US. This sees the compressor wheel constructed out of billet 17T and uses a high-flow TD04L nine-bade turbine wheel, CNC-ported compressor housing outlets, and a larger-than-TD04 thrust assembly upgrade — the whole assembly is balanced in-house to 1G levels.

Once assembled, the package will use a gaggle of power-making bolt-ons — the likes of VR Speed Factory charge pipe, intercooler, and downpipes; BMW Performance exhaust; and BQTuning MHD tune with ethanol sensor for E85.

At the time of writing, the engine is nearly ready to be reassembled.



NAME: TYSON BROWN // **AGE:** 21
LOCATION: LEVIN // **OCCUPATION:** DESIGN ENGINEER



NZ Performance Car: Hi, Tyson. Tell us about your first car and how you got into modifying it.

Tyson: Hey, team. When I was around the age of three, my parents bought me this book outlining all the makes and models of cars. I took it everywhere, trying to match cars in the book to those that I could see on the streets. From there, I always played car games like *Need for Speed: Underground 2*, and that's where I first 'modified' a car. When I was old enough to drive, my first car was a 1990 Nissan 300ZX, and I put some 19-inch Advantis on it, which made it look like a monster truck. Because of how high it was, my friends gave me the nickname 'The Skateboard', and that's basically where it all started to spiral out of control for me.

Sweet first car! You're now daily-driving this — why the Sigma of all choices?

Well, I originally had a 12A-powered Ford Escort and needed something cheap to run around in but also something that would look the part. I saw this wagon pop up for sale on Hustle Live, and I told the seller I was on the way to pick it up. It was completely standard, and I saw it as a blank canvas. I'd owned a few old Mitsis before and knew it would make the perfect daily-driver!

Is it handy being a wagon, too?

It sure is! It's helped with moving houses, chucking bikes in the back and heading to the skatepark, and weekends away. It's provided accommodation with a mattress in the back — and it can fit the *boso pipes* in the boot when they're not equipped. It's also quite handy to load the boys up, throw a chilly bin in the back, and hit the beach — although we only did that once because we got beached ... ironic.

Being an older girl, what's it like on the daily duties?

It's surprisingly good as a daily runaround. Although it takes corners like a beanbag and has no power steering, it goes everywhere and does long-distance travelling every day. I have always liked the feeling of driving an oldie and keeping it on the road.

That's the one — save the oldies. You've styled the Sigma pretty specifically; how would you describe it and where did you draw inspiration?

It definitely follows a *kyusha* style — *kyusha* being the Japanese word for 'classic car' — and the *kaido* racer style, which is where the livery, ride height, *boso*zoku exhausts, and chin lip come into play. The intention of the *boso*zoku pipe is to make the car as loud and obnoxious as possible, which it does pretty well! I drew the most inspiration from the Datsun 510 wagon of Jun Imai — the famed former Hot Wheels designer. The livery on the car is an almost identical

replica of the livery on his Datsun. However, some of my own touches have been added, including Jun's name hidden into the design.

Does it draw much attention in that form?

Yeah, it does. I actually like taking it out more than the weekend car. It's quite cool pulling up somewhere and have people take their phones out, asking what it is, or just chucking a thumbs up. The boys in blue seem to like it as well

We bet they do, especially the *boso pipes*. Cheers for the yarn, Tyson.



specs

ENGINE: Mitsubishi 4G32, 1600cc, four-cylinder
DRIVELINE: Four-speed manual

INTERIOR: OMP steering wheel, death-grip shifter, reupholstered factory seats, headrest delete, Tsurikawa handle
EXTERIOR: Jun Imai Datsun 510-style livery, 1.7-metre *boso* pipes, KE30 fender mirrors, custom fibreglass chin spoiler

WHEELS: 14x7.5-inch Enkei Cross Fever
SUSPENSION: Custom manufactured lowering springs, shortened shocks

POWER: "A whopping 30kW"
FUEL TYPE: 91 octane

TIMES: "You'd need a bigger stopwatch"

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	DRIVER	CAR	TIME	MPH	ENGINE	TRIM AS RACED
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2	Brendon Shearing	1971 Holden HQ Monaro	7.95	173.00	509ci BBC twin-turbo	C16, exhaust removed, DOT Hoosiers
3	Aaron Jenkins	1977 Holden Torana	8.28	166.15	540ci BBC twin-turbo	E85, DOT Hoosiers
4	Ben Morris	1969 Chev Camaro	8.37	168.67	580ci BBC Procharger SC	C16, exhaust removed, DOT Hoosiers
5	Craig Hedley	1994 Toyota Supra	8.46	164.19	2JZ Turbo	E85, ET Streets
6	Kerry Stewart	1923 Chrysler Bucket	8.46	160.20	540ci BBC SC	Avgas, exhaust removed, full slicks
7	Mike Black	1973 Holden HQ ute	8.53	160.86	509ci BBC twin-SC	C16, exhaust removed, full slicks
8	Gary Bogaart	1975 Falcon XB Coupe	8.67	159.72	408ci SBF nitrous	C16, exhaust removed, ET Streets
9	Shane Ryland	1980 Holden Torana	8.77	157.69	LS2 turbo	Pump gas, exhaust removed, full slicks
10	Daniel Southall	1969 Chev Camaro	8.78	161.79	406ci SBC nitrous	C16, exhaust removed, DOT Hoosiers
11	Dave Moyle	1989 Ford XF Falcon ute	8.81	158.26	563ci BBF nitrous	C16, ET Streets
12	Barry Plumpton	1974 Holden HQ	8.83	147.00	565ci BBC SC nitrous	C16, exhaust removed, DOT Hoosiers
13	Aaron Thomas	1954 Ford Pop	8.84	152.00	408ci SBC twin-turbo	Avgas, exhaust removed, DOT Hoosiers
14	Tony Gera	1970 Ford Mustang	8.92	150.83	480ci BBF nitrous	Pump gas, exhaust removed, ET Streets
15	Mike Carlton	1973 Chev Corvette	8.95	154.76	540ci BBC SC	Avgas, ET Streets
16	Azhar Bhamji	1969 Mazda R100	9.01	152.00	13B turbo	Pump gas, exhaust removed, ET Streets
17	Mike Bari	1971 Chev Chevelle	9.26	148.92	598ci BBC nitrous	C16, exhaust removed, DOT Hoosiers
18	Roger Binnema	1968 Pontiac Firebird	9.33	148.20	540ci BBC	
19	Justin Weir	1971 Chev Camaro	9.36	146.56	540ci BBC nitrous	Pump gas, exhaust removed, ET Streets
20	Craig Smith	1967 Ford Cortina	9.38	147.06	302ci Windsor turbo	Avgas, exhaust removed, DOT Hoosiers
21	Aaron Jackson	1974 Holden Torana	9.42	145.46	496ci BBC nitrous	Avgas, exhaust removed, DOT Hoosiers
22	Ben Moorcock	1974 Mazda RX-3	8.48	143.80	13B turbo	Pump gas, side pipe exhaust, full slicks
23	Geoffrey Dann	1969 Chev Camaro	9.53	152.1	540ci BBC twin-turbo	Pump gas, full exhaust
24	Ross Whelan	1934 Ford Model Y	9.59	139.55	427ci SBC NA	C14, exhaust removed, DOT Hoosiers
25	Glenn Brewer	1972 Holden HQ ute	9.65	137.26	621ci BBC NA	Avgas, exhaust removed, ET Streets
26	Darren Riches	1954 Ford Pop	9.66	133.00	540ci BBC NA	Avgas, exhaust removed, ET Streets
27	Ray Peterson	1970 Ford Mustang	9.79	140.2	417ci Windsor NA	Q16, ET Streets
28	Chris Daley	1972 Holden HQ Monaro	9.80	141.43	540ci BBC SC	Avgas, exhaust removed, DOT Hoosiers
29	Warren Black	1972 Holden HQ Monaro	9.81	137.95	555ci BBC SC	Avgas, exhaust removed, DOT Hoosiers
30	Tony Gera	1971 Chev Vega	9.85	140.00	400ci SBC nitrous	Pump gas, exhaust removed, ET Streets
31	Jason McKillop	1974 LJ Holden Torana	9.85	137.59	421ci SBC NA	Avgas, exhaust removed, DOT Hoosiers
32	Kathryn McDonald	1969 Chrysler Valiant	9.86	137.07	572ci Hemi NA	Pump gas, DOT Hoosiers
33	Geoff Sadler	1932 Ford coupe	9.89	136.29	496ci BBC NA	Pump gas, ET Streets, uncapped
34	Garth White	1963 Ford Galaxie	9.93	140.78	551ci BBF nitrous	C12, DOT Hoosiers
35	Dallas Graham	1978 Toyota Corolla Coupe	9.94	134.80	1UZ turbo	E85, DOT Hoosier
36	Tim Lacey	1981 Holden Commodore	9.94	132.51	Buick V6 Turbo	Avgas, exhaust removed, ET Streets
40	Matt Krietich	1973 Ford XA Falcon Coupe	9.95	135.56	410ci BBF NA	C12, exhaust removed, ET Streets

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SECOND CLUB

DRIVER	TEAM	CAR	QUARTER-MILE ET
Rod Harvey	Yuasa / Terry's Chassis Shoppe	Toyota Celica	5.90 @ 384kph (239mph)

6TH CAR
SECOND CLUB

DRIVER	TEAM	CAR	QUARTER-MILE ET
Charlie Bates	Mazda-B8's	20B Dragster	6.50 @ 337kph (210mph)
Cory Abbott	Terry's Chassis Shoppe	Mazda RX-7 Series 6	6.82 @ 319kph (196mph)
Brent Curran	CBR / Castrol EDGE	Mazda RX-2	6.89 @ 326kph (203mph)

7TH CAR
SECOND CLUB

DRIVER	TEAM	CAR	QUARTER-MILE ET
Reece McGregor	Heat Treatments Racing	Nissan 350Z (VQ35)	7.09 @ 329kph (205mph)
Robbie Ward	R.I.P.S Racing	Nissan R32 GT-R MGAWOT III	7.28 @ 312kph (194mph)
Reece McGregor	Heat Treatments Racing	Nissan Skyline R32 GT-R	7.41 @ 310kph (193mph)
Nick Reiri	Lawton RE	Mitsubishi Evolution VIII	7.65 @ 273kph (170mph)
Chris Kingstone-Cox	Privateer/Rotamax	Mazda 1300	7.68 @ 288kph (179mph)
Matt Buttimore	CBR	Mazda RX-3 (20B)	7.74 @ 269kph (184mph)
Ben Cox	RSL / NZ Car Parts	Datsun 1200 coupe	7.79 @ 286kph (178mph)
Adam Wigg	Wigg Motorsport	Nissan Skyline R34 GT-R (VH45)	7.81 @ 289kph (180mph)
Aaron Barnes	Privateer	Mazda RX-3 (20B)	7.83 @ 267kph (165mph)
Tony Markovina	Maz-Sport	Mazda RX-7 Series 5	7.84 @ 286kph (178mph)
Sam Khamis	M&M racing	Mazda RX-3	7.97 @ 240kph (149mph)

8TH CAR
SECOND CLUB

DRIVER	TEAM	CAR	QUARTER-MILE ET
Kris Robb	10 Tenths	Mazda RX-7 Series 4	8.03 @ 267kph (165mph)
Mathew Buttimore	CBR	Mazda RX-4	8.13 @ 265kph (164mph)
Dean Hargreaves	Rotamax	Mazda RX-3	8.30 @ 260kph (162mph)
Craig Hedley	Speedy Signs	Toyota Supra	8.46 @ 265kph (164mph)
Jeremy Hewson	Putaruru Panel & Paint	Toyota Starlet (13B)	8.54 @ 252kph (157mph)
Ryan Baldwin	Privateer	BMW E36 (13B)	8.56 @ 246kph (153mph)
Craig Davis	CBR / Pro Tint	Mazda RX-2	8.57 @ 255kph (159mph)
Jason Horn	GRP / Hytec Engines / Top RPM	Mitsubishi Lancer	8.59 @ 255kph (159mph)
Leon Ruby	Super Freight	Mazda RX-7 Series 1	8.63 @ 254kph (157mph)
Tony Markovina	Maz-Sport	Mazda RX-3 (12A)	8.66 @ 246kph (153mph)
Hilton Bush	Privateer	Mazda RX-2	8.70 @ 248kph (154mph)
Dick Richardson	Hytech Engines / GRP	Mitsubishi Evolution I	8.78 @ 260kph (162mph)
Shane Herbert	Maz-Sport	Mazda RX-3 (12A)	8.82 @ 240kph (149mph)
Chris Anderson	Anderson Construction	Ford Courier	8.88 @ 251kph (156mph)

9TH CAR
SECOND CLUB

DRIVER	TEAM	CAR	QUARTER-MILE ET
Aaron Baldwin	Privateer	BMW E36 (13B)	9.02 @ 238kph (148mph)
Azhar Bhamji	Prowear	Mazda R100 (13B)	9.15 @ 248kph (154mph)
Zach Sayer	Privateer	Nissan Cefiro (RB30)	9.15 @ 232kph (144mph)
Paul Norris	Privateer	Ford Escort Mk II	9.16 @ 241kph (150mph)
Joel Marsh	Rotamax	Mazda RX-3 coupe	9.27 @ 238kph (148mph)
Michael Zahorodny	West Auckland Rotary	Toyota Starlet (13B)	9.28 @ 234kph (145mph)
Scott Tolhurst	Privateer	Toyota Soarer (1UZ)	9.28 @ 225kph (140mph)
Jon Peplow	S.P.E.C Performance	Honda Civic EG	9.30 @ 237kph (147mph)
Suheib Kareem	M&M Racing	Mitsubishi Mirage (4G63)	9.44 @ 226kph (141mph)
Chris Anderson	Anderson Construction	Ford Courier	9.46 @ 235kph (146mph)
Ben Moorcock	Privateer	Mazda RX-3 (13B)	9.48 @ 230kph (143mph)
Tim Hawke	Privateer	Toyota Corolla KE20 (1UZ)	9.59 @ 217kph (135mph)
Oshana Solaka	APE Racing	Mazda 323 (13B)	9.67 @ 236kph (147mph)
Rob Kelly	NZ Car Parts	Toyota Corolla KE25	9.78 @ 220kph (136mph)
Jon Peplow	S.P.E.C Performance	Nissan GT-R R35	9.80 @ 240kph (149mph)
Aidan Reidy	Untamed Motorsport	Mitsubishi Lancer Evo I	9.80 @ 231kph (147mph)
Curtis Crichton-Sigley	Privateer	Nissan Skyline BNR32	9.92 @ 231kph (147mph)
Arif Samad	M&M racing	Mazda 323	9.94 @ 217kph (135mph)
Dallas Graham	Privateer	Toyota Corolla KE35 (1UZ)	9.94 @ 215kph (134mph)
Raja Bhatti	Edgell Performance Racing	Mitsubishi Evo III	9.96 @ 231kph (147mph)

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